

THE AMERICAN FARMER,



“O FORTUNATUS NIMIUM SUA SI BONA NORINT
“AGRICOLAS.” Virg.

Vol. IX.

BALTIMORE, MAY, 1854.

No. 11.

ESSAY

On the Renovation of Worn-out Lands,

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In discussing the subject of reclaiming soils, which have been either partially or entirely exhausted of their vegetating power, we have to do with all those worn-out lands, the produce from which ceases to pay for the cost of cultivation.

Although in many instances, farmers continue the cropping process when the impoverished earth struggles in vain to yield a compensating reward for the labor bestowed upon it, yet the mere fact of land being under tillage, is no evidence that it does not, in strict language, come under the denomination of “worn-out land,” since the cost of labor at a fair estimate exceeds the value of the products.

It is a deplorable fact that so much time and labor, which is an equivalent to “money and money’s worth,” is absolutely wasted in pursuing a system of agriculture, which does not add an *iota* to the general welfare, and only serves to support a miserable and precarious existence. Fertilizing agents are to be found on every hand, and science is rapidly enlarging the list of renovators, and new discoveries are being continually made, which provide abundant means for increasing our agricultural wealth and prosperity. In the manifold resources at our command, the only reasonable cause for hesitation in availing ourselves of them, is, that we may make a selection of the most judicious means for accomplishing our object, and that object is the greatest increase of productiveness in the shortest space of time, at the least expense of money and labor.

In all agricultural improvements, the profit to be derived from them, should be estimated with regard to the time required to produce certain results, but a comparatively slow improvement, may nevertheless be greatly preferable to a most rapid one, because in the one case it may be a permanent and increasing one, and in the other, temporary and partial; therefore, those means of improvement which possess the advantage of producing the most rapid return for the cost, and at the same time, are the most permanent in their effects, are really the most economical as well as valuable.

In investigating the subject of “renovating worn-

out lands,” it becomes necessary to enumerate the means, and these are to be found under the heads, viz:

1st.—Method of Cultivation.

2nd.—Mechanical and Chemical action on soils.

3d.—Fertilizing Agents.

The first head embraces, ploughing, sub-soiling, pulverizing and draining. A considerable diversity of opinion exists, as to how the minutia of these operations should be conducted, but practical experience and scientific exposition conjoin to prove that occasional *deep* ploughing is universally attended with good effects,—that sub-soiling is frequently beneficial and never injurious—that the more comminuted a soil is, the better adapted it becomes for nourishing plants, and lastly—that draining dry, all heavy wet soils, is absolutely necessary to insure a productive yield of valuable grain and grass.

In an essay of this kind it would be out of place to enter into an elaborate research, as to the causes which produce certain effects, and for all practical purposes, it is enough to know the results without examining minutely into the theory which substantiate them.

The practice of ploughing *deep—deep!* cannot be too highly recommended in every and all soils. Many farmers have an erroneous impression, that if the sub-soil is brought to the surface, its apparent want of strength will injure the quality of the surface soil; but if they will reflect that all trees, and very many plants draw their nourishment from the depths of the earth, where the plow cannot reach, it will be admitted there must unavoidably be found there matter of a fertilizing nature. The writer has seen the most astonishing effects produced by turning up to the surface three inches of what had been sub-soil!—in one instance where the land had been in cultivation under a ruinous system for more than half a century, and had become completely impoverished, it was made to yield at least two tons of clover and timothy to the acre without any other assistance whatever than *deep* ploughing!

There is no doubt whatever, that those two or three inches of sub-soil now lying dormant under tens of thousands of acres of *poor land*, if brought to the surface and properly pulverized and incorporated with the soil, would be equally valuable with a costly application of manure.

It is not contended that wonderful results would be produced in *every* poor soil by the means above specified, but where the *virgin soil* has been fertile, there, without doubt, may the constituents of rich earth be found, perhaps hoarding up for ages the very fat of the land, and awaiting only the plowshare to restore it to its destined uses! More will be said touching this branch of the subject in connection with the subsequent ones. We will now proceed to an examination of our second proposition, that of "Mechanical and Chemical action."

The first of these, strictly speaking, is confined to breaking up and pulverizing the soil, and to the laborious and expensive process for changing its texture, for applying matter of an opposite character, for a coating of sand to a soil which has proved too tough and clayey for productiveness.

Although an occasional use has been made of this means of improvement, yet it is much too expensive for any general usefulness, unless through the immediate agency of the plow.

But the term "Mechanical" may in some sense be applied to the action of lime upon the soil, since it is well known that an application of this agent does materially assist in removing the objectionable character of a tough clay, as well as that of a light, porous, sandy soil, as it has a tendency to make the former more friable, and the latter more compact.

In so far as this action affects the texture of the soil, it may legitimately be called "mechanical," although the means by which it is produced, are undoubtedly the chemical action of the lime (or its carbonate) upon the acid and basic bodies, which are contained in soils of either character.

But this change of texture is by no means, the only good effect resulting from the application of lime. The mineral constituents necessary for the growth of crops, are usually supplied by nature very abundantly in mould, clay, gravel and even in rocks, which form the surface of the earth, but they are originally such combinations with stray mineral agents, as would render them quite unavailable under ordinary circumstances, since the attraction by which they are retained, is stronger than the counter-force exerted by the growing plant. True, these combinations are being gradually broken up by the action of sun-light, in connection with ammonia, and other energetic agents, which are always in the atmosphere.

Thus it is explained why the "rest" given to land after cropping is necessary to replenish the soil, in absence of other more judicious aid. By supplying lime or substances of an equivalent action, we are only assisting nature by accelerating operations, which under ordinary circumstances are necessarily very slow. This must of course improve the fertility of the soil, since all other matter required for the growth and fruition of plants, may be derived from the air, although here again we assert nature by making the soil a store-house of these materials, by the application of manures. And here we may assert to the benefit of deep ploughing, even when it may expose to view a portion of the "poor-looking" sub-soil! For this in fact is a "virgin soil" from which, as yet, no portion of its native riches has been abstracted by the aid of air and light, and consequently peculiarly susceptible to the action of these agents, and to that of such accessions as we may supply.

In speaking of this subject, we have avoided as much as possible, any attempt at minute explanations of chemical action, partly because every ag-

ricultural publication is teeming with such, probably from more able pens, and partly because we doubt the general utility of information, of which no previous study of chemical science, has enabled the great mass of readers, who are interested in this subject, to form a well founded opinion.

We come now to the third head, that of "Fertilizing Agents."

The principle of these are, lime in its various forms, guano, barn-yard manures, ashes, composts, and chemical preparations. But notwithstanding the assortment of manures is so great, and every year augments the number, by a change of the combinations composing them, yet lime has been, and still continues to be the foundation of all thorough and permanent improvements. Although it is undeniable, that some other fertilizing agents will afford a more speedy return, for the expense of application, yet lime, at a moderate cost, will always take precedence in the rank of valuable manures, in all worn-out soils, wherever it has not been previously applied!

No worn-out lands if deficient in lime, (and most poor lands are deficient in it,) can be made really good by any other means whatever,—the reason is this:

Ordinary manures, Guano, &c. &c. are the food for plants in themselves, and when exhausted as they very soon will be, are only replaced by a large proportion of the vegetable matter they produce; whereas, lime generates that food by its action on the soil as before remarked, and thus affords a supply inherent in itself! It is true that guano without lime, will very often much more than pay for its cost in a single crop, and will leave the ground somewhat richer for the succeeding one, but the basis of permanent improvement from this source, is comparatively of little value, and it is necessarily a slow process.

Farmers who use guano alone, or similar fertilizers, will find first promises very deceitful; and that the real value of the land is enhanced thereby in a very slight degree, for the the proper foundation is wanting, and that foundation is lime!

We do not attempt to depreciate the value of any natural, or artificial fertilizer; many of them are of immense importance to the farmer, but if he wishes to "renovate his worn-out lands," and make them intrinsically valuable, he must resort to lime as the preliminary operation, and he will then find that guano and other manures will act in concert with equal force, and much more permanency.

Care should be taken not to bring manures rich in ammonia, in contact with lime in a caustic state, but no ill effects could result from this cause, where the lime had been applied to the soil one or more years preceding.

If the soil is very deficient in vegetable matter, it would be advisable to produce it by manure of some kind as a preliminary step. In accordance with the foregoing suggestions, for the "renovation of worn-out lands," we would recommend the following system, as the most economical as regards both time and money, and as far as our experience goes, certainly the most successful treatment, for reclaiming worn-out lands.

If the soil is very deficient in vegetable matter, after breaking it up as deep as possible with the plough, apply from 250 to 300 lbs. Peruvian guano to the acre, or if that cannot be readily obtained at a moderate cost, any other fertilizer producing like effects. This will produce all the materials neces-

easy for the perfect growth of plants. Wheat sown upon this will usually at least pay for all expenses and leave a considerable quantity of matter in the soil, suitable for the nourishment of the young clover, which should *always* be sown on the wheat, either in the fall or early in the spring. As soon as possible, after the wheat has been removed from the ground, apply a dressing of 50 bushels of fresh slaked lime to the acre, (measured by slaking.) During the winter rains, a considerable portion of this is carried down into the earth, and becomes thoroughly incorporated with it, and in the best possible condition for the required chemical action, which supplies the mineral constituents sought for by the growing clover. To effect a rapid improvement, the clover should be permitted to grow undisturbed, until the succeeding fall, and the lay turned under, and planted with corn in the spring, and the usual rotation of crops, but *always* apply manure of some kind to the wheat, and sow with clover in every case, and with timothy also, if the ground is rich enough to produce a growth of grass worth mowing. In the fall after the second crop of wheat, repeat the dressing of 50 bushels of lime as before, and the foundation is laid for permanent improvement, and extreme productiveness.

The plan which obtains in many parts of Pennsylvania, of depositing the fresh burnt lime in large heaps, in a convenient place, adjacent to the field to be covered, and there slaked by water brought for the purpose, is the most preferable, as the caustic lime may then be spread directly from the cart, and can thus, with care, be applied quite as evenly and much more rapidly.

By the method of depositing in small heaps over the field, the lime becomes in a measure *air-slaked*, and thus rendered far less soluble, and in worse condition for being carried down into the soil by rain, and in fact is less valuable.

By experiment, it can readily be ascertained whether gypsum enriches the soil; and if found to increase its productiveness even in a slight degree, it would be well to apply from one and a half to two bushels to the acre, as the cost is but a mere trifle, and the least perceptible effect would more than pay for the expense.

As is well known, plaster is usually sown broadcast on a clover lay, either in the fall or early in the spring.

As this is not intended as a treatise on farming, we only deal in generalities, and point out the rudiments of that system, which we conceive to be best adapted for the profitable improvement of worn-out lands. If then the owner of "poor land" has money or credit, sufficient to buy lime (if at a reasonable cost,) and ordinary capacity, with industrious habits, he has the means of making a rich farm, and eventually not only paying himself out of it for all the attendant expenses, but it will become to him, if not a mine of wealth, at least the source of competence and prosperity.

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WORK FOR THE MONTH.

MAY.

Poesy has assigned to this month all that is delightful, and its coming is looked for with feelings of anticipated pleasure, which of late years have been but seldom realized. Whatever may have

been the character of May, in times gone by, it is certain that the eulogies pronounced upon its balmy, invigorating air, are among the things of other years, not of realization at the present; for as the month comes and goes now a days, the weather which it brings is as uncertain as any others in the calendar. Therefore, let us exhaust neither time nor space in talking about the beauties of May; but turn our attention rather to the sober realities of the work on the farm, as it is from operations there, that the farmer and planter's hopes are to be fulfilled. With this object in view, we will name such things as require to be immediately attended to. First then,

CORN PLANTING.

This work in the south has been generally completed many weeks since; but still there is a broad area of territory where it has scarcely yet been begun. In many districts of the corn growing regions, we fear, from what we have heard, that the ground has yet to be broken up to put in this crop, and that there are still others, where the manure has not been secured to fertilize the soil in which it is contemplated to grow it. To all who may be thus situated, we say, with unassumed sincerity, that delays can no longer be indulged, and that both interest and duty combine to point to the fact, that success now, is only to be relied upon through prompt action. There are seasons, but they are of rare occurrence, when a few days procrastination may be indulged in, without involving serious consequences. If we look back any given number of years into the history of corn growing, we will find, that, in a majority of cases, the early pitched crop has generally succeeded best.

With regard to the time of planting corn, any rule as to day, will prove as illusory as deceptive. The safer rule, is, to plant whenever the frost is entirely out of the ground, the weather become settled, and the earth sufficiently warmed to produce germination. Let the location be wheresoever it may, these should be the criteria, which should regulate the planting time. To name any particular day of the month, as the time of planting, would be as futile as prolix of disappointment, as what would be early one year, would be late another,—and after all, the season must govern in the premises,—so to the watching of that, we commend the corn planter, in the hope, that he will make it his guide.

Having treated the subject of Corn growing fully in our March number, in all its phases, and generally in our April number, we have but little to add in our present one, and might content ourselves with a simple reference to those numbers. We will however endeavor to press a few points upon the consideration of our readers. By all considerations, you should manure broadcast with a liberal hand; plough deeply and truthfully; harrow and cross-harrow faithfully and well, and roll until a finely pulverized soil be obtained; manure in the hill, and cultivate the corn so as not to disturb the manure which was ploughed in, and also, so as to keep the weeds and grass down, and the soil at all times open to atmospheric influences.

Corn land should, among other inorganic substances, have in it potash, lime, phosphate of lime and sulphuric acid. Therefore, if they abound not therein, naturally, they must be artificially applied, as a top-dressing. With regard to the particular time when they should be applied, we will

remark, that this top-dressing may be given at the time of preparing the land; at the time of planting the corn, or at the time of the first working of it. It may be opportune here to point out such substances, and the quantities that will suffice to furnish the required supplies for an acre of soil. We will therefore do so:—5 bushels of ashes, 2 bushels of salt, 1 bushel of plaster, 1 bushel of lime and 1 bushel of bone dust will answer,—so also, will 200 lbs. of American Phosphate of lime, 5 bushels of ashes, 1 bushel of salt and 1 bushel of plaster.

OATS.

Though this crop is already generally seeded, there are still large portions of our country, where this labor has still to be performed, and we would therefore say to all who may yet have to put in oats, that the sooner they do so the better, as the early sown, in a series of years, succeeds best. And we would here observe, that those who desire a large crop, must fertilize the ground in which they may be sown, not only with organic, but with inorganic manures, and that, so far as the mineral or inorganic manures may be concerned, we know of nothing that would do better service on an acre in oats than 5 bushels of ashes, 2 bushels of salt, 1 bushel of Plaster and 200lbs. of American Phosphate of lime. These substances, if well mixed together, sown broadcast, and harrowed in with the soil would furnish all the inorganic food required by an acre of oats,—and that if the nutritive manure be applied with a moderately generous hand, such application will ensure a good crop, provided the season be favorable.

PARSNIPS, CARROTS, BEETS, MANGEL WURTZEL.

In compliance with our pledge of former years, we again call the attention of our agricultural friends to the subject of root-culture. We do so from a conscientiously entertained belief, that every farmer who may enter into it will find his interest promoted thereby, in a pecuniary point of view; besides which, he will have the satisfaction of knowing, that by providing a supply of roots for cattle-feed through the winter, to be mixed with cut hay, straw, or fodder, that he had largely contributed towards the health and comfort of his stock, and, in so doing, fulfilled a duty due alike to humanity and to true economy. We are aware that the culture of roots have been rendered distasteful to the agricultural mind, because their cultivation requires minute care and attention, and involves an outlay for labor; but such considerations should not be permitted to interfere with their culture, because they are greatly counterbalanced by the resulting benefits.

OF THE MANURES.

All roots are the better of being manured with decomposed manure; when manured thus the roots grow straight and yield better. The following quantities and kinds of manure will answer for an acre of any of the kinds of roots named at the head of this article, viz:

1. 5 double-horse cart loads of decomposed barn-yard or stable manure; 10 loads of marsh-mud, or ditch or road scrapings, or mould from the woods or mould from the headlands; 2 bushels of salt, and 1 bushel of plaster, to be formed into compost, layer and layer about, and when broken up to be thoroughly shoveled over so as to mix the several substances well together.

2. Two hundred pounds of guano, and 1 bushel of plaster, well mixed together; 3. 10 bushels of

bone-dust, moistened; 10 bushels of ashes, 2 bushels of salt, and 1 bushel of plaster, to be well mixed together; 4. 8 bushels of bone-dust, moistened, 10 bushels of ashes, 2 bushels of salt, and 1 bushel of plaster, to be well mixed together; 5. 4 bushels of bone-dust dissolved in sulphuric acid, to be mixed with 10 bushels of ashes, and 1 bushel of plaster; 6. 8 bushels of bone-dust, moistened; 8 bushels of ashes, and 2 gallons of fish oil, well mixed together. All the above except the No. 2 will be the better if kept in bulk a few days before being used.

OF THE SOIL AND PREPARATION.

All roots delight most in a deep, rich, sandy mould: the Mangel Wurtzel will prosper well in any friable Clay.

If the compost named in the No. 1 be used, it should be applied broadcast. The manures named in the other formulas should be applied in the drills.

The ground should be ploughed with great exactness, no bulks being left, and fully 8 inches deep, and would be all the better if subsoiled as many inches more in depth; the furrows should be laid flat, and harrowed until the tilth is perfectly fine. This done roll the land with a heavy roller. Having spoken of the preparation of the ground, let us state how we would put in

CARROTS.

Lay off drills from 18 to 20 inches apart, 1 inch deep. Then having prepared your seed by rubbing equal quantities of seed and sand with your hands, soaking them in warm water, draining the warm water off and drying the seed in ashes or plaster, add twice the bulk of the seed, of sand, place them in your drilling machine, (which should excavate the drill, drop the seed, cover and roll them in) and move quickly so as to distribute the seed thinly. Quantity of seed per acre. Two pounds of good seed is sufficient.

The best kinds of carrots for field culture are the *White Belgium*, and *Altringham*. The *White Belgium* grow largest and yield more bushels to the acre; though for dairy purposes, from the deep orange hue of the *Altringham* we think them best, as, when fed out to milch cows, they impart a golden tint to the butter.

Time of Seeding. From the 1st to the 15th of the month.

CULTURE.

When the plants come up and have grown to the height of 3 or 4 inches, they must be weeded with hoe and hand—with the hoe between the rows, by the hand, among the plants. If the kind of carrots drilled in, be *Altringham*, thin out the plants so as to stand 4 inches apart: if *Belgium*, they should be thinned out so as to stand asunder 5 or 6 inches. Give them two or three more workings, and you may lay them by. The great object is to keep them clean and the earth well stirred from first to last. At the first working, dust them freely with a mixture of equal parts of ashes, plaster and salt; a bushel per acre.

PARSNIPS.

Preparation of the soil, the same as for carrots.

Quantity of seed.—About 2 or 3 pounds per acre.

Age of seed.—Parasnip seed are shy of coming up if more than a year old unless they have been kept with great care.

Preparation of the seed.—Pour warm water over them and let them soak for 6 or 12 hours; then drain the water off and dry them in ashes, or ashes and

plaster, or ashes and soot: this done add twice as much sand as there are seed, mix the sand and seed well together, then place them in the Drilling Machine, and move the machine briskly in the drill.

Distance and depth of Rows.—Lay off the rows or drills 18 or 20 inches apart, and 1 inch deep.

Time of seeding, from the 1st to the 15th of the month.

Culture.—When the plants have come up and are 2 or 3 inches high, work between the rows with a hoe, weed between the plants with the hand. At this working, thin out the plants so as to stand from 4 to 6 inches apart in the drill. After you have completed this working, broadcast over them a mixture of equal parts of ashes and plaster, or ashes, plaster and soot at the rate of 1 bushel to the acre. This dusting as well as that for the carrots, would be all the better of being given them early in the morning when the dew is on the plants. At intervals of 2 weeks apart, give your parsnips a second and a third working, and you may lay them by.

MANGEL WURTZEL, SUGAR BEET.

Preparation of the ground.—Plough the ground truthfully, to the depth of 8 or 10 inches; and if practicable subsoil it also, to the depth of 6 inches more. The furrow slices should be turned flat; harrow until a fine tilth be obtained, then roll, when the soil will be fit to be seeded.

Distance and depth of the rows.—Lay the drills from 27 to 30 inches asunder, 1 inch deep.

Preparation of the seed.—Soak the seed 24 hours in warm water; drain the water off, through a colender or sifter; then add twice the bulk of the seed, a mixture of ashes and plaster, or plaster and soot; stir the whole well together, so as to separate the seed, when they will be fit to be drilled in.

Quantity of seed per acre, 3 lbs. is the proper quantity. **Time of seeding**—from the 1st to the 10th of the month.

Culture.—When the plants are 3 or 4 inches high, they should be weeded between the rows with a one horse cultivator, and between the plants by the hand. Top-dress them with a mixture of ashes and plaster, say one bushel of each per acre; let this dusting be given in the morning when the dew is on the plants. Thin the plants out so as to stand 12 inches apart in the drills. If there should be bald places, draw plants from places where they are too thick, and dibble them in so as to fill up all such vacancies. This transplanting must be done just before or after a rain. After completing the thinning out, go carefully over the rows, and whenever you discover a plant with more than 1 crown pinch off all but one.

In ten days or two weeks, run the cultivator through the rows, and weed around the plants with hoe and hand. In two weeks work the beets again, in the same way—repeat this in two weeks more, and the labor of cultivation will be at an end.

General Remarks.—Each acre of either of these roots if properly manured, ploughed and cultivated will yield from 500 to 600 bushels—1300 bushels have been raised on an acre; but as we are averse from encouraging over sanguine expectations, we have named less than half that quantity, and will add, that that product depends much upon the nature of the cultivation which may be given them.

BARLEY.

This grain should be seeded from the 1st to the 10th of the month. If put in a suitable soil, well

manured with guano or well rotted dung, it will yield from 20 to 40 bushels to the acre. The ground should be manured as for wheat, be ploughed deep, well harrowed and rolled.

Soil.—Barley delights most in fertile strong loam. Soil that would yield 20 bushels of wheat, would produce from 30 to 40 bushels of Barley. On poor grounds it is useless to seed it unless it be well manured.

Of Manure.—10 loads of marsh mud, and 5 loads of decomposed stable manure, composted together, is sufficient for an acre; so is 200lbs. of guano and $\frac{1}{2}$ a bushel of plaster well mixed together; and so would 10 bushels of bone-dust, moistened, mixed with 10 bushels of ashes be sufficient for an acre.

With this grain, on ground, manured as stated, you may sow Clover-seed with the certainty of getting a good stand of plants.

When the grain, is cut, the clover plants should be top-dressed with 5 bushels of ashes, 1 bushel of salt, and 1 bushel of plaster per acre, and the grain should be cut at least 10 days before it becomes dead ripe, as if left until then it is subject to great loss from shattering.

FALL POTATOES.

Get in your crop of fall potatoes from the 10th to the 15th of this month, and treat them as we advised in March.

SPRING WHEAT.

If you contemplate seeding any spring Wheat, get it in by the 10th of the month.

ARTICHOKES.

This tuber is really worthy of cultivation by any one who can spare 5 acres to the culture. We say who can spare that quantity of land, because when once planted they keep possession of the soil and do their own after planting. In sandy loam they will yield 500 or 600 bushels per acre. They make excellent food for milk cows in winter, cut up and mixed with cut hay, straw or fodder. For hogs, the best plan, after a sufficient quantity of the tubers have been harvested for the cows, is to turn the hogs in to do their own digging for which their snouts are peculiarly well adapted. While feeding on them the hogs require no watering, as the tubers have sufficient water in them. About the middle of October would be a good time to turn the hogs in upon them; by the time for penning them arrived they would be found fat, and require only sufficient corn to harden them. Any land that would bring 30 or 40 bushels of corn would produce the quantities of Jerusalem Artichokes named above.

Of Manure and preparation of the soil.—Manure the ground in the same way you would for a full crop of corn. Spread the manure broadcast, plough it in 8 inches deep, harrow until a fine tilth is obtained, then roll.

Mode of Planting.—Lay off your furrows 3 feet apart, 4 inches deep, then list the ground 2 feet apart, the same depth of the furrows. At every listing point, deposit an Artichoke set, and cover as you would potatoes.

Preparation of the tubers.—Cut the tubers the same as you would potatoes, into sets, each having 2 eyes, dry them in ashes, or ashes and plaster as potato sets are.

Cultivation.—Cultivate them the same as you would a crop of corn or potatoes, with the cultivator and hoe.

Quantity of Seed.—15 bushels of tubers cut into sets with 2 eyes in each, will plant an acre.

Top-Dressing.—When the plants come up, give each acre a compost comprised of 1 load of mould, 5 bushels of ashes and 1 bushel of plaster, thoroughly mixed together, giving to each list a handful of the compost.

Continuance in the Soil.—If the ground be annually manured, ploughed between the rows, and the Artichokes be cultivated, they will continue in the soil 7 or 8 years, producing good crops each year.

The top-dressing recommended above must not be omitted.

LUCERNE.

We have an article in another part of our journal, on sowing Lucerne broadcast; for that mode we refer the reader to that article; but if there be any of our readers who may have a lot of a few acres near their barns or stable that they would wish to appropriate to Lucerne for soiling purposes, who prefer the drill system of culture, we will state the method by which they should put it in, and the manures to apply. First then of the manures.

Twenty double horse cart loads of well kept stable or barn-yard manure will answer for an acre to be seeded to lucerne; so will 400 lbs. of guano and 1 bushel of plaster; so will 10 bushels of bones, moistened, mixed with 10 bushels of ashes and 1 bushel of plaster, and left in bulk a week or two to bring about an incipient state of decomposition in the bones.

The stable or barn-yard manure and guano to be ploughed in, the bones, ashes and plaster to be harrowed in.

Preparation of the ground.—If the stable or barn-yard manure, or the guano and plaster be used, either should be spread evenly over the ground and ploughed in as spread. The ground should be ploughed from 8 to 10 inches deep, and would be the better of being subsoiled 6 or 8 inches more; when ploughed, the ground must be harrowed and rolled until reduced to a fine tilth; then finish by rolling.

Width and Depth of Drills.—Lay off the drills 9 inches asunder, 1 inch in depth.

Quantity of seed per acre.—12 pounds of seed is enough for an acre of lucerne when sown in drills. If a drilling machine be used, and it is best, it will form the drills, drop and cover the seed. If you have not a drilling machine, stretch a garden line across the lot north and south, and with the corner of a hoe make the drills; then drill in the seed, thinly, cover with a rake and compress the earth over the seed with the back of it.

Time of Sowing.—From the 1st to the 15th of the month.

Top-dressing.—No matter which of the manures that may be used, after the seed is in, each acre of the ground should receive a top-dressing consisting of 5 bushels of ashes, 2 bushels of salt and 1 bushel of plaster.

Culture.—After the plants come up they must be kept clean by the hoe and hand the first year; if the lucerne be treated to the top-dressing recommended above, with the addition of 2 bushels of bones per acre, and harrowed; the effect will be to encourage the growth of the lucerne and kill the grass and weeds; by which much of the labor of hoeing may be saved. These autumnal top-dressings should not be dispensed with, as they are essential to the vigorous growth of the plant. If after each cutting a bushel of salt and 1 bushel plaster were broadcasted over each acre of the lucerne, the best results would flow from it.

Lucerne thus treated, would bear cutting three or four times in a season; and sustain three or four head of horses or cattle.

For soiling purposes it should be cut just when the flower opens. Lucerne delights in a dry warm climate, and on that account would suit the Southern States. If kept free from weeds and fed as advised, it will last from 15 to 20 years, provided the soil in the first instance be deeply ploughed and thoroughly pulverized.

MILLET.

Those who have no meadows may find in Millet a most excellent grass for hay.

Of the soil for Millet.—Millet delights most in a deep fertile sand.

Manure and preparation of the soil.—The ground should be heavily manured broadcast; the manure must be ploughed in deeply, the ground must be harrowed well and rolled.

Quantity of Seed, and Seeding.—If grown for hay, sow 4 pecks per acre; if for seed 2 pecks will be enough; sow the seed broadcast, harrow it lightly in, and roll.

Time of Sowing.—Sow the seed any time this month, up to the middle of it.

Time of Cutting.—If for hay, cut when the grain on the top of the ear first begins to turn yellow; if for the grain or seed, cut when the upper half of the ear has become yellow.

Mode of Curing.—If cut for hay, let the grass lay in the swarth five or six hours; then form small cocks, of about 50 lbs. each, let these remain until the dew is off the ground the succeeding day, then turn the cocks over, and after they have remained an hour or so in the sun, throw 4 of the cocks into one, and let these remain for a day, when the hay will be sufficiently cured to be stored away.

If intended for seed, manage it as you do wheat.

PUMPKINS.

Plant these from the 1st to the 10th of the month.

CANTALOUPE, MUSKMELONS, WATERMELONS.

Get these in as near the 1st of the month as possible. No two kinds should be planted within 3 or 400 yards of each other; for so sure as they are planted a less distance apart, so sure will the pollen be conveyed from one kind to the other, and deterioration of quality ensue.

Of Manure.—A mixture of 7 parts rotten dung and 1 part ashes is an excellent compost for such fruit. A shovel full should be given to each hill. 10 loads of mould, 200 lbs. of guano, and $\frac{1}{2}$ a bushel of plaster well mixed together, will manure the hills on an acre of ground.

Distance of the hills apart.—For Cantaloupes and Muskmelons, the hills should be 6 feet apart—for Watermelons they should be 10 feet apart.

Formation of the hills.—Each hill should have allotted to it a shovelful of the manure, which should be spread the size you intend to make the hills. When the hills are made, flatten them at the top, then plant 5 or 6 seed in each hill and top-dress with ashes and plaster pretty freely—2 parts ashes, 1 part plaster.

Culture.—When the plants first come up, and until they get into the rough leaf, each morning while the dew is on the ground, dust them with the mixture of ashes and plaster.

When the plants are big enough, thin them out, leaving 2 of the best placed and most flourishing plants in each hill. Keep them clean until the

vines cover the ground, or become so large as to render working unnecessary.

FIELD PEAS AND BEANS.

These should be got in by the 10th of the month.

ORCHARDS.

If your trees have not been treated as we advised last month, do so by the 10th of this.

WHITE-WASHING.

If not already done, after the cleaning out all your out-houses, give them a thorough white-washing inside and out. While your brush is in hand, whitewash your garden fences and those of your lane, leading to your dwelling.

DRAINING.

Permit us to remind you, that all wet grounds, whether clay, or sand, should be drained; for soil surcharged with water is incapable of yielding more than half a crop, and that of inferior quality, while manures upon such land is of little service.

IMPLEMENTS AND TOOLS OF HUSBANDRY.

Be sure to have plenty of these; and be careful to have them of the best kinds, as besides being cheapest in the long run, they are the most effective. When not in use, be careful to have them put away under cover, and at all times they should be kept in good repair.

MATERIALS FOR MANURE.

Husband every kind of material on your farm, that is susceptible of being converted into manure, and compost them, under cover, if possible; if you have no house or other conveniences to protect your compost heaps from the weather, cover them with a thick coating of earth.

WORKING ANIMALS.

As the time has now arrived, when every nerve and muscle of these generous beasts will be strained to their utmost tension, they should be well cared for, liberally fed, housed under cover, well bedded at night, watered twice a day, and cleaned night and morning.

MILCH COWS.

Let these be kindly treated, and until turned into their pastures, be fed night and morning with succulent messes.

YOUNG CATTLE AND OTHER STOCK.

Young animals of all kinds, should at all times be kept in good heart, so that they may be preserved in a growing condition. Many a young beast which, if it had been treated properly and regularly fed, would have made a full sized powerful beast, is, by contrary management, stunted in fully one third of its growth.

BROADCAST CORN.

Manure an acre or two of ground convenient to your stable, and sow corn broadcast, that you may have provender to feed your working animals.

SWEET POTATOES.

Put in a patch of sweet potatoes within the first 10 days of the month.

LIMING AND MARLING.

If your corn ground needs liming, give it a dressing of either lime or marl, though the quality may be such, it will prove beneficial. The best way to apply marl, would be to mix it with the manure that may be applied to the corn crop. If you have nothing else, a compost formed of marl, marsh mud, road scraping, woods mould, or any similar substance will be an excellent substitute, and tend to encourage the growth of the plants.

CUTTING CLOVER.

We desire to say, that clover should be cut when the flowers first develop themselves; if cut then, the soil will be saved from much exhaustion.

VIRGINIA AND ITS FARMERS.

We copy the following extracts from the address of the Hon. WILLOUGHBY NEWTON, of Va. delivered before "Rappahannock Agricultural and Mechanical Society," on 10th November last. They will be read with much interest, not only by our numerous friends in the Old Dominion, but in every other State of our Union where this journal circulates. Virginia has been aroused to a great work, and she stands forth to the admiration of the world, in the attitude of a mighty man, conscious of his ability to accomplish an important task that has been entrusted to him. The efforts now making to develop the resources of the State, to open avenues to market, to renovate the soil, to educate the masses, and to beautify the homestead, must result in placing Virginia on the very highest pinnacle with regard to the domestic Arts, and make her as beneficial and useful in this respect, as she has hitherto been prominent in the political affairs of the country.

We will follow up these extracts with additional portions from this admirable address:

"Ten years have wrought a mighty revolution in the fortunes of Virginia. A new era has dawned on our noble commonwealth, and henceforth her march is onward. The noblest victory of modern times has been achieved. Agriculture has conquered politics. During the last week a glorious scene has been exhibited. The mountains and lowlands have met together—the voice of party has been hushed, and sectionalism, I trust, has been rebuked into eternal silence. The intellect, the virtue, and wealth of the State are fully aroused; and thousands of her most gifted sons, animated by generous rivalry, have resolved to devote their means, and exert their utmost abilities to advance the interest and happiness, and true glory of Virginia. For the first time in her history, the energies of her people, and her vast resources, have been practically exhibited to general admiration, and henceforth, strangers, as well as ourselves, will have a juster appreciation of her real greatness. The times are truly auspicious for the accomplishment of the noble purposes of your association.

"The spirit that has enabled the parent Society, encouraged by a munificent private and public contribution, to triumph over all difficulties, and to carry out its late exhibition with brilliant success, is a sign not to be mistaken; whilst the earnest zeal with which the organization of this Society has been prosecuted and perfected, so that in the short space of six months, it has been established on a permanent foundation, is another augury for good.

"But what most cheers my heart, Mr. President, and assures me that the permanent prosperity of Virginia can no longer be a matter of doubt, is the knowledge that an enlightened and liberal zeal for the improvement of agriculture, has seized upon all classes of our people, and that gentlemen, in all parts of the State, distinguished for learning and ability, whose talents qualify them to shine in the forum or the senate, in the cabinet or the field, are abjuring politics and the professions, for the more

profitable and honorable calling of the farmer."

"In this period of general awakening, the Rappahannock Agricultural Society has assumed a position of great responsibility. You are as 'a city set upon a hill, which cannot be hid.' Including, within your geographical limits, the country extending from the Potomac to the Pamunky, and from the head of tide to the sea, you embrace in your organization one of the finest regions on the globe. Rich, beyond comparison, in historical associations, it is scarcely less renowned for the moral, social, and intellectual elevation of its people; whilst it is endowed, in profuse abundance, with all those physical advantages which a kind Providence has showered with so generous a hand, only on the most highly favored parts of his dominions.

"That renowned adventurer, Captain JOHN SMITH, has given, in his History of Virginia, a beautiful and graphic description of the delightful region of which you occupy the better part.—'There is (says he) but one entrance by sea into this country, and that is at the mouth of a very goodly bay, eighteen or twenty myles broad. The cape on the south is called Cape Henry, in honor of our most noble Prince. The land, white hilly sands like unto the Downs, and all along the shores great plenty of pines and firs.

'The north Cape is called Cape Charles, in honor of the noble Duke of Yorke. The isles before it, Smith's Isles, by the name of the discoverer.—Within a country that may have the prerogative over the most pleasant places known, for large and pleasant navigable rivers, heaven and earth never agreed better to frame a place for man's habitation, were it fully manured and inhabited by industrious people. Here are mountains, hills, plains, valleys, rivers, brooks, all running most pleasantly into a faire bay, compassed, but for the mouth, with fruitful and delightsome land. In the bay and rivers are many isles, both great and small—some woody, some plaine—most of them low and not inhabited. This bay lyeth north and south, in which the water floweth near 200 myles, and hath a channel for 140 myles; of depth, betwixt 6 and 15 fadome, holding a breadth, for the most part, 10 or 14 myles. From the head of the bay to the northwest, the land is mountainous, and so, in a manner, from thence by a southwest line, so that the more southward, the farther off from the bay, are these mountains, from which fall certain brookes, which after come to fine principal navigable rivers. These run from the northwest into the southeast, and so into the west side of the bay, where the fall of every river is within 20 or 15 miles one of the other.'

"This description, though written nearly two hundred and fifty years ago, is as accurate as it is beautiful. The country still abounds in hill and plain, in brooks and streams and rivers, and fruitful and delightsome land. It still has the prerogative over the most pleasant places known.

"Settled more than two centuries ago by the old English Cavaliers, its annals are rich in incident. The adventures of the early settlers by flood and field, their heroic efforts in subduing the forest and taming the savage, have lent many a thrilling page to history and romance. In later times this limited area has given birth to heroes, patriots, statesmen and farmers, of whom an empire might be proud. Had I the graphic power of a Brougham or Macaulay, I would sketch, for the benefit of the rising generation of farmers, portraits of some of

the noble men, who, born among us, have in times past lent to agriculture the light of their brilliant intellects and bright example. It would be my pleasure to delineate, not only the characters of those whose lives have become historical, but to draw from undeserved obscurity the names of others who only wanted opportunity to become illustrious. I know no task that would be more grateful—no duty that would be more becoming in this opening meeting of your society.

"The most conspicuous in this collection would be the man, who has been pronounced by the unanimous verdict of his countrymen, 'first in war and first in peace,' exhibiting in his military career the qualities, at once, of Fabius and Marcellus, and in his civil administration, the virtues of Cato and Aristides; he yet only reached the culminating point of his fame, when he voluntarily retired from public office. The artist who would present him to posterity in the attitude of his true greatness, should select the touching scene of the parting banquet, given by the merchants of Philadelphia, on his retirement from the Presidency. Here he is represented in an attitude at once simple and sublime; leaving behind him all the emblems of power, both civil and military, with a form erect, and brow serene, 'he looks forward on a beautiful landscape of Mount Vernon, in front of which stand oxen harnessed to the plough.' This, in his case, was no empty pageant. He exhibited, to the very close of his life, by his zeal, and enlightened labors in the cause of agriculture, evidence that his desire for retirement was real and sincere. Greater, far greater than Cincinnatus, he yet filled the measure of his own glory, by following the example of the illustrious Roman.

"Next would come Madison, 'the father of the Constitution,' whose genius and conservatism are impressed indelibly on all the institutions of his country. A philosopher, patriot, statesman, having devoted the greater part of his life to the service of his country, he retired from the Presidency of the republic, to discharge with equal fidelity the more humble duties of the President of the Agricultural Society of Albemarle. In this capacity he exerted the powers of his fine intellect to improve the practice, and extend the science of agriculture. In an admirable discourse before the Society, written with great care, in the pure and elegant style for which his State papers are distinguished, he exhausted the then existing stock of agricultural knowledge, offered many useful practical suggestions, and even condescended 'to talk of oxen.'

"Monroe also demands our notice. Acknowledged by all to have been wise and virtuous, yet such was the even tenor of his way, that there are few events in his public career of sufficient interest to mark him as a man or a statesman. The speech of John Randolph, lately exhumed, has presented to general notice a fact that will make the name of Monroe hereafter prominent in history. 'His accession to the administration of Mr. Madison, (says Randolph,) was the signal for a war with England.' Though the policy of that war was much questioned at the time, by pure and wise statesmen, yet its glorious results in redressing our wrongs, and giving us a name and a high place among the nations of the earth, fully vindicated its wisdom and justice. The man whose influence prevailed with the Cabinet and President, to recommend to Congress the declaration of that just

and glorious war, can no longer occupy a subordinate place in the annals of his country. Faithful in the performance of every duty, this good man retired from the Presidency to his farm, broken by the cares of State, and gave to agriculture—'twas all that he could give—the benefit of his good will and of his example. He deserves the meed of our praise. For,

"Who does the best his circumstance allows,
Does well, acts nobly—angels could no more."

"Of your own John Taylor what shall I say? The arator of the century. The man who, by his example and his intellect, first excited the general mind of Virginia to the improvement of agriculture, and whose writings have made the spot on which we stand, classic ground. Kindred minds are apt to impress each other, and to reflect the image of each other's greatness. I shall never forget a tribute, almost involuntary, of the great Farmer of Marshfield, to the Farmer of Hazlewood. It was on the memorable occasion when Daniel Webster addressed the thousands of Virginia from the east front of her Capitol, under the bright "October sun." When the address was over, a worthy gentleman from Caroline was introduced to him. Forgetting all else, he promptly said, "Sir, I am glad to see you, you come from the Rappahannock, from the land of JOHN TAYLOR."

"Pardon me, Mr. President, if I pause for a moment to pay a tribute to a great intellect, that I think, has not generally been properly appreciated in the South. Daniel Webster was truly a great intellect. He was, perhaps, the only one of our distinguished statesmen, who, upon a near approach, lost nothing of his large proportions. He possessed, in a remarkable degree, the power ascribed by Johnson to Burke, of impressing every one who approached him with the idea of his intellectual greatness. His very silence was impressive. And if you heard him talk in the most familiar way, of farming, of the application of guano on his lawns at Marshfield, of draining, of the plough, the various parts of which he knew better than the man who made it, of his oxen, or of the ocean, whose cool breezes invigorated him; or if you heard him in the zenith of his power in the Senate or the Supreme Court, handling with a giant's strength the mightiest themes, you were equally impressed with the grandeur of his intellect, which, like the ocean which he so much loved, was in storm irresistible and overwhelming, in calm, no less vast, boundless and sublime.

"There is one, whose name should be freshly remembered, especially on this occasion, when you are about to reorganize the society over which he presided for more than twenty years, with untiring zeal and signal ability. During this long period he attended every meeting of the society, and at each recurring anniversary furnished, as if from a never-failing fountain, an address, abounding in interesting facts, experiments and observations.—At the darkest hour of Virginia's history, when our wealth and population seemed fast wasting away, and the hearts of the bravest began to quail, his cheering voice might be heard urging his associates to renewed efforts for the renovation of the old Commonwealth, and appealing to them by all the considerations that bind a patriot's heart to his country, "never to give up the ship." In all this time, no question of interest, either in the practice or science of agriculture, was discussed by the public, that was not investigated by the acute in-

telleet of Garnett, and illustrated by his copious and varied learning. Yet there are thousands of his countrymen who now use his ideas, and even the implements of agriculture invented by his genius, without the slightest acknowledgment; whilst they sneer at him as a mere "book farmer," or modern enthusiast. Unfortunately, for himself, he devoted his great powers so exclusively to the advancement of the public good, that his own interest was deplorably neglected, and he has incurred the fate, which too often befalls the greatest benefactors of mankind. We, at least, should be grateful for his services, and endeavor to do justice to his memory.

"Of those, less noted in the world of fame, was Currie, of Lancaster, who, with the legal learning of Mansfield, and a large stock of polite literature, would discuss with you a legal question, or talk of Steele and Addison, of Sir Roger de Coverly, and other creations of the fancy, of the wits and humorists of Queen Anne's day, whom he greatly admired, whilst he pointed, with still greater delight, to his premium crops of corn, his peas, or composts, or Indian banks.

"His noble compeer, Chinn, my early and constant friend, on whose grave I fain would plant an evergreen, was equally zealous in our cause. Possessing rare natural gifts, which had been highly cultivated by a refined and classical education, he was the ornament of the bar, and the charm of the social circle. Yet he would contend for a county premium, for a ten acre lot of corn, with as much earnestness as if his varied accomplishments had never excited the notice of his friends, or his eloquence called forth the plaudits of an admiring audience. He would have been as distinguished in public life, as he was justly eminent at the bar, but his nice sensibility made him scorn the arts of the demagogue, and his pure nature recoiled from the low intrigues of corrupt politicians, which, in these modern times, are too often mistaken for statesmanship.

"On the opposite bank of this beautiful river, almost within the sound of my voice, sleeps the Mano of Virginia, who in times past, sung in tuneful lays

"The tillage old Virginia knows,
Which cheats with hope the husbandman that sows."

The poet and scholar, in genius little inferior to his great original, whose attractive muse so graphically described the defects of our former husbandry, that all have been taught to avoid them, should surely not be forgotten in this day of Virginia's renovation.

"In the same county, a patriarch has just been gathered to his fathers, full of years and full of honors, whose name deserves a tribute. For more than half a century John Taliaferro was devoted to the advancement of agricultural knowledge.—He freely lent his aid to every institution for the benefit of agriculture, and was an active and useful member of the Society which for more than twenty years held its meetings in Fredericksburg. Though occupied the greater part of his life in public business, yet he never lost his fondness for the country, or his taste for agriculture. He was ever ready to communicate information on rural affairs, either in conversation or through the press. His devotion to the garden, the orchard and the farm continued through life, as all must know who enjoyed the pleasure of his free and copious conversation.

"Westmoreland, also, would present to your notice another son, who, almost unknown to fame, yet claims a high niche in a temple dedicated to worth and genius. It is now thirty-four years since, quite a youth, returning home in a summer vacation, I saw the first number of the old American Farmer in the possession of Robert Murphy, who was one of its earliest subscribers. The paper then, as now, presented in its front, the beautiful and attractive motto,

*"O Fortunatos nimium, sua si dona norint,
Agricolae."*

"Its first page was filled with Cobbet and Rutabagas. My friend had evidently studied it with much attention, and after a short conversation, invited me to see his crop, in which he took great interest, and was cultivating in the most approved manner, with his own hands. I, that day, took my first lesson in practical agriculture, by assisting him in his grateful labors. Whether I was allured by the classical associations connected with the motto, or by the charms of my friend's conversation, I know not, but from that day to this I have had a passion for agriculture. Of all the men whom it has been my fortune to know, he was, unquestionably the first in true genius. Educated, thoroughly, as a physician, he not only mastered all the learning of his profession, but embraced within his comprehensive grasp the whole circle of human knowledge. In classical literature he was almost without a rival. Thinking with Junius, that every gentleman should have a competent knowledge of the laws of his country, he studied Blackstone with as much zest as he would read a novel. In history, ecclesiastical and civil, in ethics, in metaphysics, political economy, the natural sciences, and in the political literature of his own times, his knowledge was both accurate and profound. He was a literary cormorant, devouring all the learning that came within his reach, and what is most remarkable, he perfectly digested all that he devoured. He was a passionate admirer of the eloquence of ancient and modern times, and was perfectly familiar with the best models, and only wanted confidence in his own powers to have become a consummate orator. Such was his native diffidence, that he recoiled from a public exhibition of his talents, though often in the circle of his friends, when animated by conversation, he would exhibit a vigor of thought and copiousness of illustration, an elegance and variety of language, and a richness of imagery, scarcely inferior to the most gorgeous passages of Burke. He wrote with elegance and ease, and a line from Johnson's epitaph on Goldsmith, might justly be applied to him,

Nullum quod tegetis, non ornabit.

He was endowed with the gentlest nature, and possessed the simplicity and noble generosity of Goldsmith—

*"Careless their merits, or their faults to scan,
His pity gave ere charity began."*

A farmer all his life, he was yet never eminently successful. He wanted that administrative talent so essential to success, yet from the ample stores of his knowledge, he freely taught others what he himself could not practice. A man so virtuous, so modest and unpretending, yet so highly gifted, deserves some record of his existence.

"I have opened, but by no means exhausted, the casket of our 'Jewels.' Each county in the district, might doubtless add others to the list. Westmoreland alone, if it were proper to mention those

having no peculiar connection with agriculture, could offer the names of many others, whose achievements in literature, jurisprudence, eloquence and arms, have illustrated and adorned her annals. These have already been consigned to the muse of history—and we, who inhabit that hallowed soil, should not appropriate all their honors to ourselves; and indeed, if we would, we could not, for the glories of Westmoreland belong to Virginia—to the Union—to the world.

"Seeing that you are encompassed by such a cloud of witnesses, and enlightened by their instructions, and animated by their example, I need scarcely enlarge upon the responsibilities of your position, or urge new motives to incite you to 'press with vigor on' in the great work of improving our glorious heritage. There are, however, certain prevailing errors of opinion that have heretofore greatly retarded our progress, which I desire to correct. These, though exercising much less influence than formerly, still linger in some minds, and may have a depressing effect on the young and inexperienced. These errors consist in underrating the profits of agriculture in this grain growing section of the South; in depreciating the value and efficiency of slave labor; in exaggerating the unhealthiness of our climate; and in unfounded views on the state of intelligence and education among our people. Exaggeration seems to be a universal failing of reformers. Seeing clearly the evils to be corrected, they set about with earnest zeal to convince others of the existence of what seems obvious to themselves. They start with the false postulate, that 'figures cannot lie,' and accumulate credulities, which they call statistics, until the imagination is bewildered with the result of their calculations. And no matter to what object their benevolent efforts are directed, whether to the cause of agriculture, or education, their zeal is ever apt to outrun their discretion, and in many minds, by their very extravagance, they produce distrust; whilst others, appalled by the magnitude of the difficulties to be overcome, surrender themselves to despair, and make no effort to surmount them.

"I have, therefore, had occasion to express myself on some of these topics, and will not repeat what has already been said. Twenty years ago, the State was threatened with depopulation, mainly owing to the desponding tone in which it was the general habit to speak of the prospects of our agriculture. Even such men as Garnett and Barbour, though themselves determined never to despair, could offer no solid ground for hope, and relied only on the patriotism of the people, and the wisdom of the Legislature, to arrest our downward course. Yet there was never a time, except in the most disastrous seasons, when the labors of the farmers of Eastern Virginia, if directed by skill, and pursued with industry and economy, have not yielded a fair remuneration. The numerous instances of men, who, even in the worst times, by patience and steady industry, have accumulated fortunes in the pursuit of agriculture, is conclusive evidence of this fact. It is not wonderful that many failed, who trusted their business entirely to the management of agents, without either motive or skill to conduct it successfully. How many merchants or manufacturers, think you, would conduct their business without bankruptcy, even for a single year, who should pursue the same reck-

less course? Yet in many instances, it was after the lapse of years, before our negligent farmers discovered that their business, thus mismanaged, had been unproductive, and they determined to remove to a new country, there to practice an economy, industry and self-denial, that would have made them eminently prosperous at home. With-in these twenty years the science of agriculture has made unexampled progress, and in no part of the world has its improvement been more rapid, or its results more profitable, than in the favored region which we inhabit. Wheat, which was formerly considered so precarious a crop that its culture was almost abandoned, has now, by improved husbandry, the use of lime, marl, clover, plaster, and the best of all fertilizers, guano, become our greatest staple, in the production of which we can defy the competition of the world. So rapid has been the improvement, and so great the increased profits of agriculture, that it may be safely affirmed, that in the short space of seven years, the value of the landed property of Eastern Virginia has been fully doubled; whilst of many neighborhoods, it has been quadrupled, and some particular farms increased more than ten fold. I can see no reasonable limit to this improvement, if we continue to pursue the same course of steady, enlightened and hopeful industry, that has now become almost universal. The only misgiving that ever crosses my mind, is the fear that the supply of our greatest fertilizer may become insufficient, or be entirely cut off. This I should regard a great public calamity, demanding the earnest consideration of the government and the country. If any negotiation with Peru can prevent an evil so greatly to be deplored, I trust that the wisdom and patriotism of the present administration may be found sufficient for the crisis, and that no pecuniary consideration, however great, will interpose a barrier to its accomplishment. That the supply of guano, under the present arrangement, is likely to continue inadequate, is more than probable. The demand for it by cotton and tobacco planters is daily increasing, whilst for all the cereals, it is now regarded as a prime necessity. The quantity on the Islands is said to be inexhaustible, and if opened upon fair terms to the enterprise of our merchants, no fear need be entertained that all our wants would not be supplied. The farmers throughout the country, without distinction of party, should call upon the government to interpose promptly. There can be no constitutional objection, even in the minds of the most scrupulous. The treaty making power, has, certainly, legitimate control of the whole subject. It might stipulate with Peru, for an adequate consideration, to throw open the trade in guano, at a price stated per ton, at the Islands, to all American merchants, and if thought expedient, Congress could levy a sufficient duty on the commodity to indemnify the Government, in a reasonable time, for the money expended. The sum necessary to effect this great and beneficent object, alike interesting to all parts of the country, ought to be, and doubtless would be, cheerfully appropriated by Congress."

GUANO.

The following, which we copy from an able English work on *Soils and Manures*, by John Donaldson, will be found interesting. He thus speaks of guano:—

"The excrement of birds—which is found in large quantities in the South Sea Islands—is now imported into Britain, and has been found to be a manure of considerable value. It is called *Guano*; and is used extensively as a manure in South America. We give the analysis of it by Dr. Ure.

	Grs.
Urate of ammonia,	9.0
Oxalate of ammonia,	10.6
Oxalate of lime,	7.0
Phosphate of ammonia,	6.0
Phosphate of ammonia and magnesia,	2.6
Sulphate of potash,	5.5
Sulphate of soda,	3.3
Sal. ammonia,	4.2
Phosphate of lime,	14.3
Clay and Sand,	4.7
Clay and organic matters,	32.3

The last item, 32.3, is loosely given, or this analysis might be taken as a fair sample of fertilizing guano.

Another sample analyzed by Dr. Ure was partly decomposed, and had begun to emit an ammoniacal odor, to present an alkaline reaction, or a perceptible evolution of the volatile alkali. The total constituents were found to be

1. Of matters soluble in water, 47 grains

	Grs.
Sulphate of potash and soda,	6.0
Muriate of ammonia,	3.0
Phosphate of ammonia,	14.32
Sesqui-carbonate of ammonia,	1.00
Sulphate of ammonia,	2.00
Oxalate of ammonia,	3.23
Water,	8.50
Soluble organic matter and urea,	8.95
Insoluble matters, 53 grains.	

	Grs.
Silica, or flint,	1.25
Undefined organic remains,	9.52
Urate of ammonia,	14.73
Oxalate of lime,	1.05
Sub-phosphate of lime,	22.00
Phosphate of magnesia and ammonia,	4.50

"Dr. Robertson, of Edinburg College, in his *History of America*, published in 1777, mentions that the natives of Peru enriched the soil with the dung of sea fowls, of which they found an inexhaustible store in all the islands situated along that coast. The Spaniards continued the custom from the ancient Peruvians, and used it as the chief promoter of every cultivated vegetable. The first specimen was brought to Europe in 1804 by Baron Humboldt, when it was examined chemically by Fourcroy and Vauquelin. It showed one-fourth of its weight of uric acid, partly saturated with ammonia, small quantities of sulphate and muriate of potash, phosphates of ammonia, magnesia, and lime, also some flinty and ferruginous sand. Nearly thirty years elapsed after this introductory notice of Guano before the substance attracted much observation; it was mentioned by Sir Humphrey Davy, and recollected by Sir Joseph Banks, and trials on a small scale were made to test its efficacy as a manure. It was also ascertained, beyond all doubt, to be a vast accumulation of fecal matter from sea birds, chiefly of the gull, gannet, pelican and cormorant families; vast flocks of which, at certain seasons, darken the air as they move along in these latitudes. These marine birds invariably repose on the same spots, there passing the night; the

quantity of excrement or guano, therefore, is unceasingly augmented, and as it does not rain much in that part of the world, the surface is never washed or liquified by heavy rains, as it would be in our country, the mass consequently becomes solid, and requires to be removed by the power of man.

"In its native country, Guano gets mixed with sand, salt water and occasional rain. The irregularly accumulated masses slip down the declivities, where the birds never roost, and where the substance is exposed to the washings of the spray of the sea, and to cohesions of sand from the top and sides of the hollow places in which it is lodged. Hence, as is the case with similar substances, no two samples are found to agree in their constituents, and as the color is of a brown tint, guano is very easily adulterated by mixtures of sandy loams. This is said to be practiced extensively by dishonest traders."

"The Peruvians apply guano by putting a small quantity in the bottom of each hole, over which the crop is planted by the dibble. When the plant rises above the ground, more guano is diffused as near to the roots as possible, and *watering is never omitted, thus showing that moisture is necessary for its action.*"

"Little more than ten years has elapsed since guano was generally known as a manure over Britain, and during that time the substance has been established as a very valuable auxiliary manure, equal to bones in many cases, and even reckoned superior by some persons to that powerful fertilizer, on light soils. Like to bones guano requires a soil of fine texture and warm composition, and also a benign climate in which dryness and sunshine prevail more than cloudiness and humidity. These are the provisions of all auxiliary manures, and yet they require a certain degree of moisture for their action. The price of guano is now below £10 per ton, and the allowance of 5 cwt. to an acre reduces the cost to an amount that cannot exceed the means of application. This quantity supposes the sole use of guano as a manure for turnips, and the crop to be eaten on the ground by sheep. It is now considered better to lay about twelve one horse cart loads of farm-yard dung into drills, to cover it by reversing the drills, and to sow by means of Hornby's Drop drill machine, two cwt. of guano over the dung, the guano being mixed with fine dry soil or finely sifted ashes, and the turnip seed being deposited along with the mixture. There is much to recommend the treatment; the quick and spirited action of the guano pushes forward the turnip plant very early into the rough leaf, placing it beyond the reach of enemies; and when its more evanescent qualities begin to fail, the roots of the plants reach to the farm-yard dung, which supplies the more durable nourishment throughout the season, and also leaves by decomposition an earthy residuum as food for the support of future crops. In both these ways guano proves very advantageous, and in point of lightness of carriage, which is the general quality of auxiliary manures, it is fully as commendable as any light body of that denomination. The average importation the last five years into Britain exceeds two hundred thousand tons, the last two years being rather stationary than advancing, chiefly from the high price demanded by the Peruvian government, with whom it is a monopoly."

The following remarks, which we extract from the *London Times* of May 16, 1851, contain some excellent information on the subject of this manure:—

"It is of no use seeking for a useful guano in any locality where it rains; one week of wet weather in any year would carry away all the ammonia, reduce it from being worth £9.5s. a ton to less than £4. According to the history of the exploration of Shark's Bay, as contained in the first volume of Grey's *Western Australia*, the storms of rain which fall there between the middle of February and the end of March are almost incredible, and therefore I feel certain that when the analysis of the guano lately brought from these seas is given by the venders, it will prove by no means satisfactory. If it were not for the rain our own Land's End, also Craig, and isolated spots, would furnish plenty of guano without going round Cape Horn for it."

"Again, it is useless to look for guano in any place which is thickly inhabited. Cultivation and civilization disturb that repose which is required by the birds to form those immense masses which are to be found on the Peruvian coast islands. In the days of the Incas it was death to molest the birds, so well did those intelligent rulers know that quietude was essential to the well being of the birds. For this reason I expect that the new discovery of guano at the Seychilles Islands will be very limited in quantity, and owing to the heavy rains known to be prevalent there, of a very inferior quality, similar to those from *Saldanha Bay* and *Patagonia*, or perhaps as good as that from *Ichaboe*, which was worth about half of the Peruvian."

"Guano is to the farmer what insurance is to the merchant—it guarantees to him the profit of his labors. After the husbandman has ploughed, harrowed, and sown, the application of this potent manure insures to him a return of his labors. Unfortunately, the temptation to adulterate it is so great, and the facilities for doing so are so numerous, that unless the farmer purchases of the importer direct, or some highly respectable dealer, he cannot feel certain that he has obtained the genuine article. As it is of the highest importance to him that he should obtain it free from adulteration, I have thrown together the following remarks, which will tend to show to him if the guano is adulterated, Peruvian or not."

"If a Farmer has purchased two samples of guano, let him fill any two measures of similar capacity with them both and weigh them; the heaviest is adulterated, or at least not Peruvian. I use a couple of large pill boxes with satisfactory results."

"If any doubt hangs on his mind, then let him do as I did, and write to Messrs. Anthony Gibbs & Sons of 15 Bishopsgate street, enclosing a sample, and that firm will no doubt send to him by return of post the information required. I intended to buy the small parcels I wanted from them at £10 10s. per ton, but they recommended me to an agent from whom I now get it at a less price, and with the importers own delivery orders, and am satisfied that I now get it genuine."

"A better test than that of mere capacity and weight, is to burn 200 grains of guano in an open fire, in a common sixpenny iron ladle; it must be frequently stirred, and after keeping it at a strong red heat for ten minutes, and allowing it to become

cold, if the ashes weigh more than 72 grains it is not genuine Peruvian guano. This test never fails me."

"Adulterations of Peruvian guano with sand or fine clay may be made so as to deceive the eye; but an adulterated sample, when compared with the genuine, by weighing a similar bulk, and by burning and then weighing the ashes, cannot escape detection. The quantity of guano imported last year from Peru was 95,083 tons, which at £9-5s. per ton amounted to £889,000, and the quantity from all other localities was 21,842 tons, which at £4 is equal to £87,000, together, £976,000, paid by the agriculturists for this manure alone—unquestionably a very large sum of money, and therefore it fully justifies the examination of this subject in all its bearings."

"Liebig asserts in his Chemical Lectures that he believes the importation of one cwt. of guano is equivalent to the importation of eight cwt. of wheat; the one cwt. of guano assumes in a time which can be accurately estimated, the form of a quantity of food corresponding to eight cwt. of wheat. In other words, 9s. worth of Peruvian guano in a twelve month is converted into thirteen bushels of wheat—say, worth £3 5s."

These speculations of the Times correspondent are given as they appeared, and speak for themselves.

THE RESCUE GRASS—HOW TO RAISE SEED.

To the Editor of the American Farmer.

Dear Sir—Having been requested by many of the Farmers and Planters of Virginia and Maryland to give my mode of raising seed of my most excellent winter grass, and to have it published in your extensively circulated paper, so that all of your subscribers who design to cultivate it may know how to proceed, I avail of this opportunity to do so, as follows: Select a dry, loamy and rich piece of ground, break it up deep, pulverize it well, and lay off rows 18 or 20 inches apart. Drill in the seeds, rather thin, and cover them lightly. This should be done as early in September as possible. A peck of seed will sow a $\frac{1}{4}$ of an acre. Give the grass a working or two the first month and keep all poultry off until it is six or eight inches high. It should not be cut or grazed the first winter, although neither hurts it. When the seeds are ripe, they shed out easily; strip the heads by hand. Plenty of seed will fall out for a stand. The seed being gathered, turn under the grass and plant peas, (the Oregon, Shinnery or Black,) either in drills or broadcast, and cover lightly with the rake or harrow. In the fall save the peas, or let the hogs intended for pork have them. Let the vines and leaves lie to rot on the surface, being a good coat of manure to stimulate the growth of the young grass, which will spring up over the ground early in September, and in November the grass will be beautiful and ready for use. As a small piece of ground is managed, so can a field of any size, with this difference, in large fields use rows three or four feet apart, following the plan recommended by me in the March-No. of the American Farmer.

One word to the Farmers and Planters of Virginia and Maryland. This Grass, Pea and Stock, will do more for you than all the guano in the world if you had it free of cost. This Grass, the Pea and good stock, will put money in your pockets, instead of the pockets of the Peruvians and other foreigners.

They will furnish all the manure which your fields require. They will enrich them, and keep them rich for ages, and pay you largely in other ways besides. They will not make your fields sterile, as the constant application of Guano will certainly do.—They will enable you to leave your estates in good condition for those who will certainly need them when you and I are dead and gone, and they cost almost just nothing.

Your obedient servant, B. V. IVERSON.

CAROLINE Co. Md., near Federalsburg, }
March 24th, 1854. }

To the Editor of the American Farmer:

Dear Sir:—Being one of your subscribers, and feeling assured of your willingness to give advice, I wish to be informed of the best method for securing a permanent pasture, which may be seeded down in April. I have a lot of ground newly cleared, which I purpose converting into a permanent pasture, and being a young farmer am somewhat at a loss. The soil of my lot is of black mould, surface about three inches thick, below which is white clay or fullers-earth bottom, and will grow I suppose about three barrels of corn per acre, in its present condition, provided the season be dry, the land being low and very wet, although a ditch passes through it. Now, I wish to know what sort of manure or treatment will make it produce abundantly, and how much to apply to the acre; what kind of grass seed will best suit, and how much to sow to the acre, and also whether a combination of oats with the grass will injure its growth or not. By replying to this in the April number of your valuable American Farmer, you will greatly oblige.

Yours very respectfully,

MITCHELL COVEY.

Reply.

Unless our correspondent should under-drain his lot, so as to relieve it of its water, we don't know how he can make a good permanent pasture out of it. If he will cut and make under-drains—covered drains—20 feet apart, to conduct the water from the soil into the ditch, he may then succeed in converting his wet lot into a permanent meadow. After making the drains, he should permit the land to remain untouched for two or three months, to become relieved of the superabundance of water. That done, let him plough it 5 inches deep, harrow and roll it; then apply 20 loads of good manure to the acre, plough in the same depth as before, harrow and roll again, and sow on each acre of it, broadcast, 50 bushels of lime, or 50 bushels of ashes, or 100 bushes of shell marl, harrow that in, and roll. The ground being thus prepared, let him sow on each acre of it, 1 peck of Timothy seed, 1 bushel of Orchard grass-seed, $\frac{1}{2}$ bushel Kentucky blue grass seed, and $\frac{1}{2}$ bushel of Red-top.

In the present condition of his soil, we know of no grass that would succeed on it but Red-top, and that but indifferently well. When one undertakes to make a permanent pasture he should do it well. The best time for sowing the grass-seed would be from the 15th of August to the 10th of September. Grass-seed do take with oats and other small grain, but we prefer sowing them by themselves.

Four hundred pounds of guano, per acre, would answer in the place of the stable and barn-yard manure; so would 10 bushels of bones, moistened, and mixed with 50 bushels of ashes per acre; the ones and ashes to be harrowed in.

WORK IN THE GARDEN.

The time has come when every effort should be made to have every bed in the garden filled with vegetables. To defer action would endanger success throughout the season; and as such is the case, we will endeavor briefly to state what should be done, and that quickly.

SETTING OUT CABBAGE PLANTS.

You should avail yourselves of the first seasonable time this month to set out your Cabbage plants. But recollect, that as the Cabbage is a greedy feeder, the bed in which it may be planted should be heavily manured, if you desire to have a good crop. You need not fear to manure too liberally, as it delights in generous food and plenty of it. If you have barn-yard or stable manure, cover your bed three or four inches deep; let the spades-man take small slices, and be careful to turn in the manure well, and rake as he proceeds with his work. When the ground is dug and raked into fine tilth, top-dress the bed freely with a mixture comprised of 5 parts ashes, 2 parts salt and 1 part plaster.

If you have no barn-yard or stable manure, substitute guano for it; twenty pounds will suffice for a bed 40 feet by 60 feet. If guano be used, the same top-dressing should be used as is recommended above.

Every time your cabbages are worked, they should receive a dusting of ashes, or ashes and plaster, which should be applied early in the morning when the plants are wet with dew. In times of drought, the watering pot should be freely used; for cabbages without moisture cannot grow luxuriantly.

If you have not been provident enough to have raised cabbage plants, procure a few hundred from those who have them for sale, of the early and late varieties, and set them out, in order that your family may not be denied so delicious a luxury—nor your friends when they may dine with you be disappointed by not seeing them on your table.

SOWING CABBAGE SEED.

Sow seed of the *Early York*, *Sugar Loaf* and other kinds of early cabbages, for summer and autumn use: also seed of the *Drum-head Flat Dutch*, the red pickling and other large varieties for winter cabbages.

PLANTING OUT CAULIFLOWER, AND BROCCOLI PLANTS.

Prepare a moist, though not wet, bed in your garden, and set out your Cauliflower and Broccoli plants. The bed should be prepared in the same way recommended for cabbages.

SOWING CAULIFLOWER AND BROCCOLI SEED.

Sow seeds of each of these for late crops.

WATER MELONS—CANTALEUPES—MUSK-MELONS.

Manure a deep sandy loam bed, spade the manure in spade deep, rake the ground finely every three or four feet until the bed is completed; then for Water melons form hills ten feet apart; before you raise the hill spread a spade full of well rotted manure, (which should be mixed with the soil), on each spot where you intend to raise a hill. If you have not stable or barn yard-manure for this purpose, guano mixed with mould, say in the proportion of 20 lbs. of guano to 2 loads of mould, will answer, for a bed of 2,400 square feet. The same mixture will answer for putting at the bottom of the hills.

When your hills are formed, give them a very free dusting comprised of five parts ashes and one

part plaster; rake this mixture in; then plant 6 or 8 seed in each hill, and pat down the surface with the back of a shovel or spade.

When the plants first come up, dust them with the same mixture, early each morning until they get into the rough leaf. When the plants are large enough, thin them out so as to stand two vines in a hill. Keep the bed and hills clean and the earth well stirred, drawing the earth around the roots as far as the seed leaves until the vines cover the ground. When the vines begin to make runners, top them off close, either with the scissors or nails of the finger and thumb; the plants acquire strength by the operation, and are thereby encouraged to put out fruitful runners.

The distance of the hills for the Cantaleupes and Muskmelons must be six feet apart—formed in the same way as just recommended for Watermelons, and the plants receive the same treatment.

Water-melons, Cantaleupes and Musk-melons, should be grown as far apart as the size of your garden will admit of, to prevent mixture and deterioration. Indeed it would be best to raise but one kind in the garden, and to have patches elsewhere, remotely apart for the other two kinds. We have known a single gourd-vine, which trailed on the fence contiguous to a bed of Cymbilins, to spoil the latter for edible purposes.

PUMPKINS.

Early this month,—within the first ten days, Pumpkins should be planted, but we certainly would not advise their being planted in a garden. The corn field, or a patch of ground on the farm is the place for them. They are of course an ugly concern, and if planted in a garden but serve to mar its effect and expression.

Their culture should be similar to Watermelon.

SQUASHES—CYMBILINS.

The preparation of the ground for them, the formation of the hills and general treatment the same as for Melons—distance of hills apart, six feet. They should be grown as far from Melons, &c. as the garden will allow of. Plant about the 10th of the month in the Middle States, earlier in the South.

CUCUMBERS.

Prepare a bed as for Melons and plant Cucumbers, distance of hills apart 4 feet—treatment the same as for Melons, &c.

CORN FOR ROASTING EARS.

Prepare a bed with a southern exposure, by manuring it with three or four inches in depth of good rich stable or barn-yard manure, or with 20 lbs. of guano mixed with one load of mould and 10 lbs. of plaster to a bed 40 by 60 feet. Dig either in spade deep, rake the ground perfectly fine; then stretch your garden line and at every three feet excavate holes six inches deep, twelve inches wide, into each of these place a spadeful of either of the manures, fill up with the excavated earth to within two inches of the top, then drop five or six grains of early corn into each, and fill up even with the surface with the excavated soil, pat down the top, then give the whole bed a top-dressing comprised of two bushels of ashes, one gallon of salt and one quart of plaster.

The cultivation of the Corn the same as that grown in the field, except in times of drought, when you must have your roasting ear patch freely watered every evening just before sun-down.

SWEET POTATOES.

Get these in early this month, say within the first ten days.

CULTIVATION OF THE EARLY CAULIFLOWERS.

Keep the bed in which your early Cauliflowers have been planted clean, the earth open to atmospheric influences, and from time to time as the plants advance have the earth drawn around the stems. In dry weather water them every evening just about sun down.

Towards the latter end of the month the earlier plants will begin to flower; they should be frequently examined, and when the flowers are advanced in growth, let some of the largest leaves be broken down over them to protect them from the sun and wet.

SOWING BORECOLE SEED.

Sow a principal crop of green and red Borecole seed for autumn, winter and spring use.

In the Southern States this variety of the Cabbage family would stand out all winter without harm. They are never so delicious until they have been subjected to severe frosts. Their sprouts, which is produced in abundance, in spring are truly a delicacy; perhaps the best that comes to market. Besides being a favorite of the table, the Borecole makes a most excellent food for winter and spring feeding for sheep. Standing the winter in open culture, being hardy, and when the soil is rich and well manured, growing three or four feet high, may be fed upon by sheep when the ground is covered with several inches of snow. Hence then, besides being a vegetable admirably adapted to garden culture, it is eminently worthy of being grown in the field for the winter and spring food of sheep.

GOURDS.

Don't let one grow within a quarter of a mile of your Watermelons, Cantaleupes, Muskmelons, Cymbins, &c.

BRUSSELS SPROUTS AND JERUSALEM KALE.

Sow seed of these to raise plants for setting out.

BEANS.

Drill in a few rows of these every 10 days during the month.

GARDEN PEAS.

To secure a continuous supply of Peas, you should drill in a few rows every seven or ten days during the month.

LETTUCE.

Set out such plants as are large enough, for heading, and sow seed on your border. Tie up such of your early plants as show a disposition for heading.

SMALL SALLADING.

Sow seeds of small sallading of all kinds.

CAROLINA AND LIMA BEANS.

Plant them in the beginning of this month.

RADISHES.

Sow Radish seed at intervals of a week throughout the month.

SPINACH.

Drill in a few rows of spinach seed every ten days during the month.

CARROTS—PARSNIPS.

Drill in your crops of these the *first week* in this month for winter and spring use.

BEETS.

Weed and thin your early sown beets, and drill in your crop for fall and winter use.

ONIONS.

Thin out and work your onion bed.

TURNIPS.

Hoe and thin out your early sown turnips, and put in another bed for successive use.

SALSAFY.

Clean and thin out your early Salsafy, and sow more seed for fall and winter use.

PEPPERS.

Sow seeds of the various kinds of pepper in the beginning of the month. If you have plants grown in a hot-bed, set them out about the middle of the month, one foot apart.

TOMATOES.

Set out your plants—if you have any—and sow seed for late crop.

EGG-PLANT.

During the first week in this month sow seed of this plant. Your early plants should be set out any time between the 15th and 20th of the month.

OKRA.

Sow seed of this in the first week of this month for a general crop, and again about the 15th of the month.

ENDIVE.

Sow seed the first week in this month for an early crop. Sow again towards the last of the month for a late one.

NASTURTIUMS.

The seed of the Nasturtium should be sown the first week of this month.

POT-HERBS—MEDICINAL HERBS.

Sow seed of these the first week of the month.—If the weather should prove dry, the beds must be kept wet by daily waterings.

ROOTS AND PLANTS SET OUT FOR SEED.

These should be staked up to prevent injury from winds.

COMPOSTS FOR CORN IN THE HILL.

The following substances if composted together, by intimate admixture, will form a most excellent compost to manure corn in the hill, and afford to each hill in an acre about a pint of the mixture.

No. 1. 1 double horse cart load of marsh mud, or any kindred mould.

2 bushels of ashes,
5 bushels of bran,
1 bushel of Plaster,
1 bushel of mixed lime.

No. 2. $\frac{1}{2}$ double horse cartload of marsh mud, or mould of any kind,

2 bushels of slacked ashes,
20 lbs. of Guano,
1 bushel of Plaster.

No. 3. 1 double horse cart load of marsh mud, or mould of any kind,

5 bushels of ashes,
5 bushels of Brewers grain's,
1 bushel of Plaster.

No. 4. 1 double horse cart load of marsh mud or mould of any kind,

5 bushels of slacked ashes,
100 lbs. Packer's or Chandler's Greaves,
100 lbs. of African Guano, or the same quantity of American Phosphate of lime,
 $\frac{1}{2}$ bushel of Plaster.

No. 5. $\frac{1}{2}$ double horse cart load of marsh mud, of any kind, $\frac{1}{2}$ do. do. do. do. of barn yard or stable manure,

5 bushels of ashes,
100 lbs. American Phosphate of lime,
1 bushel of Plaster.

No. 6. 1 double horse-cart load of woods mould,
2 bushels of bone dust,
5 bushels of ashes,
1 bushel of Plaster.



BALTIMORE, MAY 1, 1854.

TERMS OF THE AMERICAN FARMER.

\$1 per annum, in advance; 6 copies for \$5; 12 copies for \$10; 30 copies for \$20.

ADVERTISEMENTS.—For 1 square of 12 lines, for each insertion, \$1; 1 square, per ann., \$10; $\frac{1}{2}$ column, do. \$30; 1 column, do. \$50—larger advertisements in proportion.

Address, SAMUEL SANDS, Publisher.
At the State Agricultural Society Rooms, No. 138 Baltimore-st. over the "American Office," 5th door from North-st.

THE QUARTERLY MEETING of the Maryland State Agricultural Society will be held at the rooms of the Society in this city, the FIRST WEDNESDAY IN MAY, at 8 o'clock in the evening, and continued the following day, to enable the members from the Eastern Shore to be present. As the PREMIUM LIST for the Fall Show will then be arranged, and matters of importance brought before the meeting, a full attendance is expected. Members of the Society who may have any suggestions to make for its benefit, are invited to attend.

By order, SAMUEL SANDS, Sec'y.

PRIZE ESSAY ON FARM BUILDINGS.—The Committee appointed to examine the Essays on Farm Buildings, offered for the premium of the Maryland State Agricultural Society, have awarded the same to Chas. B. Calvert, Esq. the President of the Society, and will make their report to the Executive Committee at the May meeting. The Essay, and description of the buildings recently erected by Mr. Calvert, will appear in an early No. of the American Farmer, accompanied with a beautiful lithographic engraving. We have not seen the buildings erected by Mr. C. but learn that the whole plan and arrangements present the most complete establishment of the kind ever erected in the U. States. Mr. Calvert has received many applications for a copy of the plan of his buildings; all persons desirous of obtaining copies will be able to procure them through the medium of this journal.

SEEDS.—We have received a few small packages of garden seeds from the Agricultural Department of the Patent Office, which we will divide among our friends.

VALUABLE FARMS FOR SALE.—We refer those wishing to make investments in Va. lands, to the advertisements in the present and late Nos. of the Farmer. There are some great bargains to be had in these lands, and the attention of capitalists and farmers wishing to procure farms in easily improved locations which must increase greatly in value, and which are offered at rates very low, is invited to them. Northern farmers have opportunities offered for investment, which would soon enrich them by the improvement thus effectuated in a very few years.

Among those offered is one by W. C. Knight, Esq. the price of which, at present, is very low, so far as we are able to judge. The tract in Kanawha Co. would probably make a valuable Sheep Farm. 3000 acres for less than \$10,000, cannot but be a great bargain, we should think.

The tract of land near Norfolk, also advertised in this number, presents an excellent opportunity to those desirous of a location suitable for the raising of early fruits and vegetables, and should be speedily enquired about. And by the by, a valuable farm in Baltimore Co., advertised by Messrs.

Leakin and Barnes, offers strong inducements for the same purpose. We learn that it is a very kind soil, admirably located for market farm, and in the hands of an enterprising man, could be made very valuable.

The farm of Mr. Ferguson, near this city, is one of the most valuable in the vicinity, and for a dairy farm could hardly be surpassed. Its proximity to the city, makes it very desirable; it could no doubt be so divided as to pay well, for country seats.

The farms advertised by Mr. Dozier, and Mr. Gresham, are also worthy of attention to those desirous of obtaining land in the best wheat district of the country.

THE LATE SNOW STORM.—The snow storm experienced the middle of April, was more violent than any that had preceded it, at the same season, for a third of a century—and we fear that very material injury has been experienced to the early fruits. We hear also that the tobacco plants in this state, and in some instances the young clover, were also much injured.

The spring operations on the farm and in the garden, have been much retarded by the lateness of the season, and it will require the husbandman to be up and adding to recover the lost time.

The appearance of the wheat crop in this section, is generally of a very satisfactory character, and bids fair amply to remunerate the farmer, who, no doubt, will have good prices awaiting him when it is ready for delivery.

DOUBLE HORSE-CART-LOAD OF MANURE. What we mean by a double-horse-cart-load, is this:—a cart which, when filled, will require two horses to haul it—we use the term in contradistinction to a one horse-cart-load. The cart we used in the distribution of manure, was of the capacity of 25 bushels, Winchester measure, and required two horses, two oxen, or two mules, to haul it. We trust that this explanation will be satisfactory to our friend S. E.

LUCERNE.

As we feel deeply solicitous that this herbage plant should be grown in our country, we copy from professor Gray's admirable work, entitled, "Elements of Scientific and Practical Agriculture," the following chapter upon the culture of Lucerne: He says,—

"*Lucerne, medicago sativa*, is called in this country, *French clover*. It is a perennial plant, sending up several small shoots resembling clover, but with spikes of blue or violet flowers. It was early cultivated with the Romans, and is now cultivated in many countries of Europe, South America and the United States. The seed of Lucerne is obtained in the same manner as that of red clover, from the second crop, and is contained in pods which are easily threshed."

"The Soil should be siliceous, with deep tillage and dry sub-soil. No soil is too rich for it, and unless it is well prepared by finely pulverizing it, the crop is liable to fail. Loudon recommends trenching, but it flourishes well after potatoes or roots of any kind, provided the manures are green and deeply ploughed in."

Time for sowing varies from the 1st to the 20th of May, and the quantity of seed is from 15 to 20 lbs. per acre when sown broadcast with rye, and 10 lbs. when sown in drills, 3 feet apart, and other crops (as roots) cultivated between."

The after culture of this crop, consists in harrow-

ing, twice a year, after the first year (if sown broadcast,) and in removing all the weeds. But if sowed in drills, it must be cultivated with the cultivator and kept clear of weeds. Ashes, gypsum and lime are excellent top-dressings.

The time of cutting, and the mode of curing, are precisely the same as for clover, but it is fed to the best advantage in a green state, or for the purpose of soiling. It may be cut for this purpose from 3 to 5 times in a single season, and the quantity cut from an acre has been stated at from 5 to 8 tons, in one season. The soiling of one acre is sufficient to keep from 5 to 6 cows during the soiling season. It is therefore an invaluable plant, where pasturage is scarce or dear. But is also an excellent hay, equal in all respects, according to some farmers, to clover.

We know of no forage plant that we would prefer to this, and especially for culture in the Southern States. We saw in an Agricultural paper about four years since, the assertion made, that it was not adapted to the South, the which opinion we combated, at the time, and now seize the occasion to affirm, that we believe it is better calculated for culture in that region, than almost any other provender plant. Its deep tap-roots penetrate the earth three feet, and upwards, and there find moisture, when the surface soil is as dry as a bone, to use a very common comparison. But why should it not be adapted to the Southern States? It grows luxuriantly in the Southern part of France—so also in Italy, in Spain, and in South America. But to make assurance doubly sure, it is a fact, that it has been grown in the South in luxuriance and with success, and what has been done there, may be done again. Of the power of Lucerne to resist the drought, we had a most striking evidence last summer. In our way to our place of business, we passed daily by a lot which had been in grass and Lucerne, for several years, being originally *sowed to grass and lucerne*. A strange mixture we confess; but as there is no disputing about tastes, it is not our province to complain, because the fanciful seeder of the lot in question, tried to bring about a state of union and harmony, between the families of plants, which, by their natures, are the very antipodes of each other. But it may be excusable in us to say, that Lucerne delights not in the communion of grass, or weeds, of any kind. It may be sown with oats or barley—oats we think the best; but after the oats, or barley shall have been cut, all intrusions of grass or weeds must be prevented; and fortunately it can be done at little cost, as it can be effected by spring and autumnal harrowings, to be performed with a short tined one-horse harrow.

We have stated that our business walks called us by the patch of lucerne before alluded to, daily, and it was also, our daily habit, during the long and withering drought of last summer, to observe its relative effect upon the grass and lucerne; the result of which was this;—while the grass was burnt up, and its foliage literally reducible to powder by the tread of the foot, the *lucerne* remained green, healthful in appearance, and in fact, comparatively luxuriant, thus showing its wonderful capacity to resist drought, and battle with hot suns, and consequently its peculiar adaptation as a fodder plant to the Southern, as well as middle states.

Of the soil, professor Gray says that it should be "siliceous with deep tillage and dry subsoil,"—and his opinion is correct. The soil should be one in

which sand largely predominates; the tillage should be deep, and the subsoil as well as the surface soil should be dry. A deep, dry sandy loam or mould is the best.

As to the preparation of the soil, we would recommend that it be ploughed 8 inches deep, and subsoiled 6 or 8 inches more; that after ploughing that it be harrowed until thorough pulverization be obtained, and that it be rolled before the oats be sown, so as to present a smooth surface, and ensure an equal distribution of the oats.

Seeding the oats.—Sow $1\frac{1}{2}$ bushels to the acre, harrow and cross harrow the oats in thoroughly; then sow upon each acre 20 lbs. of Lucerne seed; harrow them in lightly, say 2 inches deep, and roll the land with a heavy roller.

Of the Manure.—20 double-horse cart-loads of stable and barn-yard manure, over which 100 lbs. of guano should be spread just before being ploughed in, should be applied to each acre: or 400 lbs. of guano and 1 bushel of plaster, to be ploughed in, will answer in its stead: 4 bushels of bone-dust, 400 lbs. of American Phosphate of lime, 5 bushels of ashes, 1 bushel of plaster and 2 bushels of salt, to be intimately mixed together, and suffered to lie in bulk 10 days, then to be shovelled over, spread broadcast, and harrowed in, would form an excellent dressing for an acre.

Subsequent Culture.—When the oats are cut, dress the lucerne with a mixture comprised of 5 bushels of ashes, 2 of salt and 1 of plaster per acre, to attract moisture and afford the requisite inorganic food to the plants. If weeds should appear, as doubtless they will soon after the oats are harvested, let some of the small hands on the place under the superintendence of the overseer or some trustworthy adult, weed the lucerne by hand.

Every spring and fall the lucerne should be lightly harrowed and rolled: Every second fall, it should be top-dressed with 2 bushels of bone-dust, 1 bushel of salt and 1 bushel of plaster per acre, to be harrowed in, and the ground rolled. The harrowing will destroy the weeds, while, from the great depth of the tap-root of the plant, the lucerne will not be injured, but on the contrary, benefitted by the operation.

When the plants first come up, it may be necessary to give them a dressing of lime, to prevent the ravages of the fly that sometimes attack them before they get into the rough leaf. This dusting should be repeated for several successive mornings, early.

A lot of Lucerne thus put in, and treated, would last for 15 or 20 years, and bear cutting from 2 to 5 times a year, according to the season.

As we anticipated, last month, so soon as the war in Europe, which was then inevitable, should have actually commenced, the demand and price for our breadstuffs would be increased, and the temporary decline that had taken place would be recovered from. The formal declaration of war declared by England and France against Russia, and the commencement of hostilities, is the beginning of a contest, the end of which no mortal eye can discern—that it will be a bloody contest no one can doubt—that it will also be a prolonged one, there is every probability—the reasons for which belief we could, if it were our province to enter into the subject, present to our readers—but we must content ourselves with urging upon the agriculturists of our country, to avail of the folly and madness of the despots of the old world, by providing their subjects with the necessities of life.

FLORAL DEPARTMENT.

Prepared by John Peart, Florist, 279 Lexington st. for the American Farmer.

Owing to the inclemency of the weather last month, the early growth of nearly every thing out of doors was destroyed—which will retard the progress of vegetation more than for many years past, and make quite a backward season—but after all, a fine season for the planting out of hardy trees and shrubs, as favorable to their growth. As the weather becomes fine, planting should be done at once, to finish all the hardy growing plants first, and then the more tender plants can be put out to fill out the borders wherever required for flowering through the summer months, and then in the autumn taken up and repotted.

Dahlias; plant out, and have rods put down to each root at the time of planting, to secure their growth, by being neatly tied up—reput your seedlings, and plant out those that are large enough—you can also propagate those from cuttings.

Gladiolus, *Tuberoses*, *Ferrarias*, &c. plant out in the borders for flowering; make the ground rich, and cover the roots about three inches deep.

All Annuals that have been kept in pots for turning out in the borders for an early flower, plant out now, and sow seeds of annual, biannual, and perennial plants; be careful not to sow the seed if the ground is too wet; they seldom succeed as well.

Verbenas, and all such plants—turn out of pots in the borders, and group them by putting the different colors to themselves; they have a finer effect by having them distinct, each colour to itself—plant out all seedlings that are large enough.

Greenhouse Plants of all kinds might be moved out this month, in a situation for the summer—have proper places to protect such as are easily injured by the scorching rays of the sun, which are fatal to many plants of the finer fibred rooted varieties, as *Heaths*, *Epacris*, *Diosmas*, &c.; have the pots a little shaded by a slight covering of moss, if no convenient place can be had; some prefer keeping them in the house, others in a cold frame, while others plunge the pots to the rim out of doors; but having seen all tried, we cannot say which is the best mode to keep them during the summer, as much depends on the soil, management, &c. and the attention bestowed; to have fine specimens, amply repays all who are fortunate to succeed, by their beautiful and delicate flowers so abundant during the winter and spring months, and adds much to the appearance of any collection, when in a fine state of health—but we feel doubtful if they will ever become much cultivated, till we have more moisture in the atmosphere, which is much wanting in this climate—the plants are readily struck from cuttings in sand under a bell glass, in a medium temperature.

Evergreens—Transplant such as are growing in pots, by turning the entire ball of earth, and planting in a good wet soil; when rather elevated they do better then when too deep. Many new ones have lately been introduced and have proved handy, which as specimens for beauty require no comment, such as *Auricularia Juibricata*, *Cryptomeria*, *Japonica*, *Deodor Cedar*, *Cupressus*, *Funebris*, *Juniperus Excelsa*, *Do. Ericoides*, *Do. Cinerascens*, *Do. Chinnensis*, *Ilex*, *latifolia*, *Libocedrus chilensis*, *Escallonia Macrautha*, *Cappessus*, *Lambertiana*, *Euonymus fumbriata*, *Taxodium*, &c. and many more too numerous to mention at this time, and much called for, which for ornament cannot be surpassed when

clumped or planted singly on a Lawn, requiring no more than ordinary culture.

Some of the subscribers to the *Farmer* have inquired of us what is meant by *inarching*—It is simply tying two branches together, of equal thickness if possible, as they unite quicker, but take off the bark with a little of the wood like a shaving, both from the parent plant and the stock, about two inches long, and place them together, seeing that they unite as much as possible—soft twine will do to tie them—if properly done they will unite in less than two months, then separate by cutting loose from the parent plant and the top of the stock which throws all the strength in the inarch, and keeps all radical shoots off below where inarched. Most all hardy wooded plants can be increased in this way, if stocks of a similar kind can be obtained.

"BERNESE CATTLE."

We copy from the "Cotton Planter," the following description of a breed of Cattle, raised in Switzerland, which it is proposed to introduce into the United States. Mr. Robert Nelson, of Macon, Geo. intends visiting Switzerland, for the purpose of making a selection, and has, we learn, obtained subscriptions for the purchase of about 20 head for planters in Georgia and Alabama, and is desirous of obtaining additional names to his list. He expects to leave this country in June, therefore if there are any of our public spirited breeders desirous of availing of this opportunity to take part in the importation, it will be necessary for them to be prompt in taking the necessary steps for the purpose. Mr. Nelson says that the first cost of these cattle is about \$150 per head, and the inland transportation to a port in Europe, and then brought to this country, will cost about \$200 each, additional. A gentleman of Maryland, who is acquainted with Mr. Nelson, thus speaks of him:

"With regard to Mr. Nelson's capacity for the undertaking, I have no doubt,—I made his acquaintance during a trip through Georgia last year. I found him a thoroughly practical man, and in the full confidence of the most estimable gentlemen and enterprising agriculturists of that country."

The editor of the *Cotton Plant*, in a recent tour through Georgia, visited Mr. Nelson, at his Nursery, in that State, and thus speaks of this breed of cattle upon the testimony of Mr. Lamar, of Macon, corroborating all that had been said by Mr. Nelson of the Bernese Cattle—Mr. Lamar says, "I have just returned from Europe, and whilst in Switzerland, I saw the 'Bernese Cows,' and I found these cattle by far superior to any English breed with which I am familiar. The Bernese Cows are undoubtedly the finest in the world."—Mr. Lamar further says, "On board the *Asia*, in which I returned home from Liverpool, was a fine Durham Cow, which was to be delivered in New York for £200 sterling, or about \$960; and I saw many Bernese Cows in the neighborhood of Berne, one of which I would not give for two like this Durham." Mr. Lamar is well known in Georgia, and will respond promptly to any inquiry for information sought on this subject.

With this introduction, we give the following extracts from a communication of Mr. Nelson on the value of these cattle, and as we approve of the maxim to "try all things and to hold fast to that which is good," so we hope that this enterprise may be encouraged by some of our friends in the Middle States, as well as those of the South.

"I would mention, that for fifty years my father was one of the most extensive, if not the largest practical farmer and stock breeder on the European continent; that I was regularly raised and trained to that business, and for many years assisted him, until political circumstances caused me to settle in America.

"We tried for many years all the now highly recommended English breeds of cattle, as Durham, North Devon, Ayrshire, Alderney and others, but the final result was, that we rejected them and tried the Switzerland breeds. In 1825, when travelling all over Europe to see and learn as much as possible in regard to farming and stock-breeding, I brought home to my native country, Denmark, different breeds of Switzerland cattle, as the Swytz, Freiburg and Bernese. The latter proved to be the greatest acquisition to the country in every respect, for milk as well as for meat. They are of large size, excellent milkers, and very quiet and gentle. As many persons like to show their supposed great intelligence by blaming any new experiment, many predictions as to their unfitness for our climate were given; they all, however, proved wrong, for, when kept on the same pasture and stable, and on the same quantity of forage as other breeds and native cows, the result was entirely and by far in their favor; and as it is a well known fact, that some cows, or some breeds will give much richer milk than others, the milk of the Bernese cows was by far the richest. The farm where they were kept was a very dry sandy and gravelly soil, just like piney woods in Georgia. Somebody may perhaps object, that the climate of Georgia is much warmer than that of Switzerland. To this I would say, that the dairy farms of Lombardy and Italy are always stocked with Bernese cows, which are doing just as well among the Orange groves, as in the cold climate of Denmark. The finest cattle are to be found in Emmenthal, Haslithal and Oberinathal.—For five centuries the inhabitants of Switzerland have devoted their whole and undivided attention to their stock, their only source of subsistence, and while several of the English breeds properly may be termed "artificial," the Bernese certainly must be pronounced "natural," and even of great constancy, which is of great importance, as any stock-breeder will know.

"For fifteen years, I had the control of a constant stock of from 200 to 300 Bernese cows, and so confident am I of their superiority to all other breeds for Georgia, that I should be glad if any person here would try to get information about them from reliable sources, which, I am sure, would prove, that I have not said too much in regard to them, and although well acquainted with other European continental breeds, I would not recommend them for Georgia, as they are not fit for it."

MANURE FOR SWEET POTATOES.

A correspondent asks us the proper manure for sweet potatoes, and we reply that he should make a compost of

- 5 double horse loads of well rotted dung, and
- 5 do. do. do. of wood's or other mould or of

15 double horse loads of wood's or other mould, and 150 lbs. of Peruvian guano.

1/2 bushel of plaster.

Mix the whole well together, and apply it as hereinafter detailed. In the first place, the soil

should be a deep rich sand, well exposed to the sun; *secondly*, the ground should be deeply ploughed, thoroughly harrowed, and rolled. The ground being thus prepared, lay it out into squares four feet apart; at the angle of every square dig a hole 12 inches deep, 18 inches diameter, into which put four inches of the compost, throw thereon four inches of the excavated earth, mix the compost and earth well together, after which draw the remainder of the earth over the mixture so as to form a round hill about twelve inches on the top, which should be flat. Into each of these hills plant two sets, cover the hills one or two inches deep, as the plants advance in growth, the hills should be enlarged in size, by drawing the earth up around them with a hoe, or by cross ploughing the ground, harrowing with a very narrow harrow, and finishing and rounding the hills with a broad hoe. The vines must be kept free from weeds. Frequent enlargement of the hills will encourage the growth and increase the number of roots.

After the hills are formed and the potatoes planted, each hill should receive a free dusting of a mixture comprised of 5 bushels of ashes and 1 bushel of plaster.

Time of planting is from the 1st to the 10th of this month.

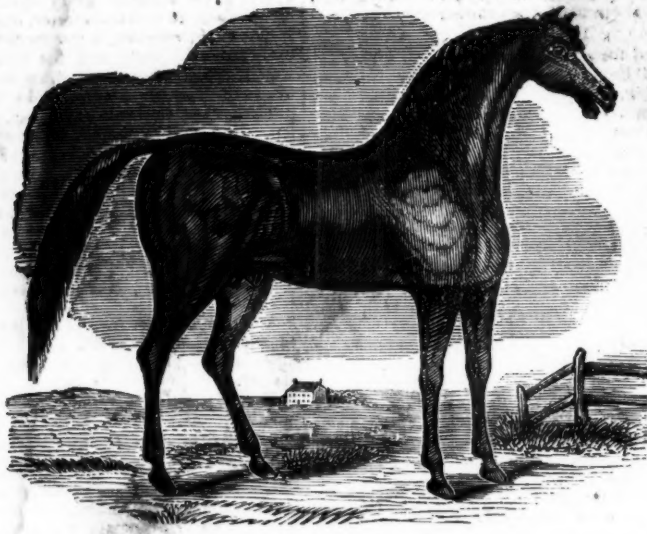
[THE FIELD BOOK OF MANURES; OR THE AMERICAN MUCK BOOK; treating of the nature, properties, sources, history and operations of all the principal fertilizers and manures in common use, with specific directions for their preparation, preservation and application to the soil and to crops; as combined with the leading principles of practical and Scientific Agriculture, drawn from authentic sources, actual experience and personal observation; by D. J. Browne.]

Such is the title of a new work forwarded to us by the publisher, C. M. Saxton, New York. Its title is sufficiently expressive of the character of the book, and it leaves us nothing to say upon that point. We have looked through it, and found it replete with facts and information, which should be in possession of every agriculturist, as they intimately concern his noble calling; many of them actually indispensable to enable him to direct his practice by the lights of science. It is truly a valuable work—one whose liberal patronage would conduce greatly to the advancement of the farming and planting interests.

We received, just as our paper was made up for the press, a very interesting communication from the venerable George W. P. Custis, of Artington, on the subject of the Sea Island Sheep, alluded to in our last. We much regret being obliged to defer its publication until our next issue.

CLAMS.—C. S. is informed that, in the opinion of the Editor, lime made from Clam shells, is just as valuable as that made from Oyster shells. Though he has no analysis to refer to, of lime made from Clam shells, judging from their nature, he presumes their elemental constituents to be very similar, if not identical with those of Oyster shells. In either he should expect to find from above one, to above two per cent. of the phosphate of lime, if the analysis were correctly made, and for that reason, he believes that lime made from the one or the other, or from both, burnt together, to be more valuable than stone lime.

DANDOLO,



An accurate Engraving, taken for the American Farmer—Dandolo is now standing at Philip Pearce's, near Monckton, Baltimore Co.

DANDOLO, sired by Ivanhoe; his dam by Red Murdoch; g. dam by Old Duroc; g. g. dam by Florizel; g. g. g. dam by imported Gabriel; g. g. g. g. dam by imported Bedford; g. g. g. g. g. dam by imported Grey Messenger; g. g. g. g. g. g. dam by the imported horse Hunting Squirrel.

IVANHOE, by Virginian; his dam by imported Archduke; g. dam by imported Stirling; g. g. by imported Obscurity; g. g. g. dam by imported Wildair, out of imported Crib Mare. may 1—It

ATKINS' SELF-RAKING REAPER.

40 Of these machines were used the last harvest in grass or grain or both, with almost uniformly good success, in nine different States and Canada.

TWENTY-SIX PREMIUMS,

including Two at the Crystal Palace, (silver and bronze medals,) were awarded it at the autumn Exhibitions. I am building only 300, which are being rapidly ordered. Mr. Joseph Hall, Rochester, N. Y., will also build a few. Early orders necessary to insure a reaper.

Price at Chicago, \$175—\$75 Cash with order, note for \$50, payable when reaper works successfully, and another for \$50, payable 1st December next with interest. Or \$150 cash in advance.

Warranted to be a good Self-Raking Reaper.

Agents properly recommended wanted throughout the country. Experienced agents preferred. It is important this year to have the machines widely scattered.

Descriptive circulars with cuts, and giving impartially the difficulties as well as successes of the reaper, mailed to post-paid applications.

J. S. WIGHT.

"Prairie Farmer" Warehouse, Chicago, Feb. 1854. mh 13t.

McCONKEY, PARR & CO.

Grocers and Commission Merchants,

No. 87 and 89, Bowly's Wharf, Balt.

OFFER their services to Farmers and others, for the disposal of GRAIN and other produce. Having devoted many years to the business, they flatter themselves their long experience and extensive facilities enable them to assure the highest going market prices, and entire satisfaction in the sales. Personal attention is given to the delivery and weighing of Wheat consigned to their care. Charge for commission, one cent per bushel.

They would call the attention of Farmers to their large and extensive stock of GROCERIES, WINES and LIQUORS, and would solicit an examination before purchasing elsewhere.

Particular attention given to the purchase of Agricultural Implements, Seeds, Guano, &c.



C. H. DRURY, corner of Camden street and Light street wharf, having completed his establishment with Foundry connected, for the making his various Castings, is prepared to furnish all varieties of AGRICULTURAL IMPLEMENTS and CASTINGS, made to pattern of the best material.

The following is a list of PLOWS kept constantly on hand: Davis, or the different numbers, for wrought and cast shear, S. & M., Chenoweth, Wiley, 2 and 3 furrow, No. 9, Hill side, No. 1 and 3 Connecticut—Beach Improved or Posey Plow, with common Davis cast shear—Self-sharpened or wrought shear—Corn Cultivators, plain and expanding—Tobacco do.—Wheat Fans—Corn shellers with double hopper—Old Vertical and Virginia sheller—Harrows—superior Pennsylvania made Grain Cradles—Revolving Horse Rakes—Cylindrical straw Cutters, &c. &c. Horse Power GRIST MILLS, a very useful and saving article, and coming into general use. HORSE POWER AND THRESHING MACHINES, of these I need not say any thing, as wherever they have been in use any time, they are preferred to all others.

C. H. D. will this year make a smaller size Power & Thresher, (price of Power, \$100, Thresher, \$50, Band, \$10, or when taken together complete, \$150 cash.) Persons in want of implements made of the best material, and put together in the strongest and best manner to answer the purpose for which they are intended, are invited to call on the subscriber. Jel

SUPER PHOSPHATE.

NO EXPENSE has been spared in the combination of this most fertilizing manure, which contains the nutritive properties of all plants. It is superior to most of the articles offered for sale under their name, and is inferior to none; although sold at a much lower price. It is put up in bags at \$40 per ton of some 2000 lbs.—Cash.

Office of the New York Super Phosphate Manufacturing Company, No. 159 West street, New York.

mh 3t

VICTOR KNOWLES, Agent.

Mrs. Vanderbilt, No. 185 Suffolk Street, says of

Dr. M'Lane's Celebrated Liver Pills:

“Being unwell, and not knowing whether it proceeded from derangement of the liver or merely hysterics, I was persuaded to purchase a box of Dr. M'LANE'S CELEBRATED LIVER PILLS, and before I had used them all, was entirely relieved. I am now enjoying perfect health, and cheerfully recommend Dr. M'Lane's Celebrated Liver Pills to all similarly afflicted.

New York, March 25, 1852.

P. S. The above valuable remedy, also Dr. M'Lane's Celebrated Vermifuge, can be had at all respectable Drug Stores in this city.

“Purchasers will please be careful to ask for, and take none but DR. M'LANE'S LIVER PILLS. There are other Pills purporting to be Liver Pills, now before the public.

A CERTIFICATE

FROM ONE OF OUR WILLIAMSBURG FRIENDS

New York, August 30, 1853.

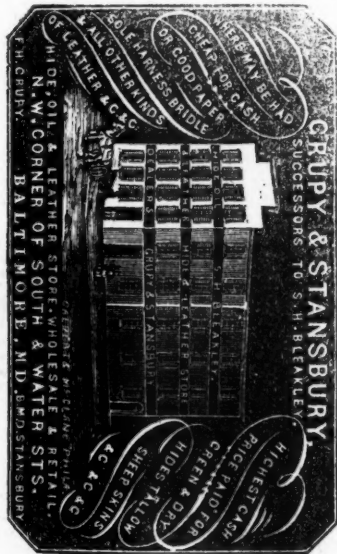
“I hope every one, whether adult or child, who may have reason to believe they are troubled with worms, will take DR. M'LANE'S CELEBRATED VERMIFUGE. I firmly believe it is one of the greatest worm destroyers of the age—certainly the most extraordinary I know of.

A child of mine, about five years old, has been troubled with worms about six months back; we could get nothing to relieve it until we came across Dr. M'Lane's Vermifuge, of which we gave but a small quantity. The result, however was extraordinary. The child passed over three hundred worms.

MR. LENT, Williamsburgh, Long Island.

P. S. The above valuable remedy, also Dr. M'Lane's Celebrated Liver Pills, can now be had at all respectable Drug Stores in this city.

“Purchasers will please be careful to ask for, and take none but DR. M'Lane's Vermifuge. All others, in comparison, are worthless. may 1-1t



WE have in Store, and finished as large an assortment of Leather as can be found in the City, and our facilities of finishing, and amount of room, is unsurpassed, and we promise to all who may see fit to patronise us, to give them a fine article of any thing they may see fit to order from us. Manufacturers supplied with Oil, Tan, Lace, Band Leather, &c., on favorable terms. The Best of French Calfskin, and Patent Leather, Patent Bindings, and Tanners Oil. Country harness can be supplied with a prime article of Dry Hides. may 1-1t

FARM FOR SALE.

The subscriber offers for sale a farm of 135 acres of Land, 100 arable and other balance in wood, with first rate improvements, well watered, &c. It is one of the most productive Hay and Grain farms in the State, and is now well set in Grass. This farm is well known as the property formerly of Ewd. Kenly, Esq., who probably had a larger amount of money expended in its improvements, than any of the same size in the State. It is within 4 miles of the city of Baltimore, near the Frederick Turnpike Road; more land could be had with the improvements if desired. It will be sold or exchanged for city property. Address

may 1-1t* J. HENRY FERGUSON,
Catonsville P. O. Balto. Co. Md

Virginia Land For Sale.

AS COUNSEL and Agent for the heirs of DAVID ELLINGTON deceased, I offer for sale a Tract of Land containing about 1000 ACRES, lying in Prince Edward Co. Va. on the Richmond and Danville Railroad, about four miles above its terminus with the South Side Railroad. Its location with respect to the two Railroads, gives it every necessary market facility. The soil is naturally fine, and is susceptible of a high state of improvement—but for the last 12 years it has been lying in a neglected state, during a controversy, (now recently determined), in respect to the Will of the former owner. The present owners reside in several of the Western States, and for this reason a great bargain will be sold. One or more skillful and enterprising farmers from some of the Northern States, would find a profitable investment in this land. The quantity of Timber Land is amply sufficient for all the purposes of the farm. Besides the adaptation of the soil to the cultivation of Tobacco, and all the usual grain crops of the country, it is probable that the Hay crop can be made easy and profitable, in consequence of the large quantity of branch flat. It is estimated that the aggregate lengths of the small streams which water the tract, is from ten to twelve miles.

“Further particulars will be given when requested, by the undersigned, whose address is “Jeffress Store P. O. Nottoway Co. Va.” Persons desirous of examining the land can easily do so, as it is within two days’ travel from the city of New York. may 1-1t* W. C. KNIGHT.

Land For Sale.

THE undersigned offers for sale a tract of Land in Westmoreland county, Va. containing 585 acres, and lying immediately on Nomony Creek. The Creek is navigable for vessels freighting from 2 to 3000 bushels of grain. It is estimated that there are on the land, within one mile of the water, from 3 to 4000 cords of Wood. This, beyond doubt, can be made one of the best grazing farms in the country, as there is a large strip of hard marsh along the creek shores, and a fine meadow attached. A more particular description is deemed unnecessary, as a personal view and examination, it is presumed, would be had before purchasing. Terms to suit the purchaser.

I will also sell the Farm upon which I reside, containing 500 acres. There is a comfortable Dwelling House, and the necessary Out-houses. The Farm is located in a desirable neighborhood, convenient to Churches, Stores, Post Office, and Steamboat Landing, and can, in the hands of a judicious manager, be made a very excellent forest farm.

Possession would be given at once, the purchaser taking the stock of Cattle, Hogs, Sheep, &c. at valuation, and the farm hands for the remainder of the year; or it would be given at the expiration of the present year, with the privilege of seeding wheat. Terms upon this tract also, made to suit the purchaser. For further particulars, address me at Monrovia, Westmoreland Co. Va. or apply to Mr. Sands, Editor of the American Farmer. may 1-1t W. R. DOZIER.

TO VIRGINIA FARMERS AND OTHERS.

The undersigned offers for sale the following approved Horse Powers and Thrasher, warranted superior in workmanship and operation to any lever power in the Country. Light four Horse Power and Thrasher complete including belting, &c. &c., \$120. A good size four Horse Power and Thrasher, belting complete, \$135. 6 Horse Power and Thrasher, &c. complete \$150. The above Machines are warranted to give general satisfaction to purchasers.

N. B. At the above rates, the Machines are sold complete. Which includes Belting, Shaker for Thrasher. Oil Cans, Wrenches, &c. &c. Orders solicited.

may 1-1t F. B. DIDIER & BBO. 97 N. Paca St. Balto.



SUFFOLK

AND

Essex Pigs.



PURE BRED, for Sale by EBEN WIGHT, Boston, or B. F. KEYES, Dedham, Mass. ag 1-1t

ZIMMERMAN & CO'S CELEBRATED PATENT Premium Thrasher, Cleaner & Bagger,

WHICH received the First Premium at the Crystal Palace, N. York, this making 10 Premiums in two seasons, in competition with the most celebrated Separators of the day; proving conclusively, that simplicity in construction, cheapness in price and durability in machine, is being fully appreciated, and the old complicated costly separators must yield their place to a superior machine. This Machine, for threshing, separating, cleaning twice, screening and bagging, (by one simple operation,) all kinds of Grain—the greatest labor-saving machine extant, for simplicity, durability, cheapness and capacity, it has no rival in the world. It is capable of turning out, ready for the mill or for seed, from 300 to 500 bushels of Wheat per day, with 6 or 8 horses, and 8 hands—or from 500 to 800 bushels with 12 horses and as many hands, doing the work cleaner, and breaking less grain, than any machine now in use. This machine received the first premiums at the Maryland State Fair, Balt., in 1852 and 1853; the Washington Co. Md. Fair; Valley Agricultural Fair, of Virginia, in 1853 and 1854; the Rappahannock Agricultural Society, at Port Royal, Va.; Indiana State Fair, Indianapolis, 1853.

This machine is so simple in construction, that the one fan and shoe completely cleans and bags the grain, dispensing with all the complicated machinery (and consequent liability of derangement) in all other separators, thus making it more desirable to the farmer.

OF SEPARATORS OF ZIMMERMAN & CO'S. THRESHERS, CLEANERS, BAGGERS AND POWERS.—Thrasher, Cleaner and Bagger complete, 6 and 8 horses, \$175.—Power for same, \$100, making \$275 for the whole complete. Thrasher, Cleaner and Bagger, 36 inch Cylinder, \$200; Power for same \$135, for 8, 10 and 12 horses. This machine is complete with Band, Wrenches, &c.

OF REFERENCES.—Samuel Sands, Esq., Editor of the "American Farmer;" Col. Edward Lloyd, Easton, Md.; Capt. D. Cox, Northumberland Co. Va.; Hill Carter, Esq., Richmond; Richard Willis, Esq., Richmond; Col. Charles Carroll, near Ellicott's Mills, Md.; F. Nelson, Esq., Richmond; Col. B. Davenport, Jefferson Co. Va.; Dr. Harding, Northumberland Co. Va.; Capt. Harding, Northumberland Co. Va.; Hugh Nelson, Esq., Clarke Co. Va.; Charles Mason, Esq., King Geo. Co. Va.; S. W. Thomas, Esq., Clarke Co. Va.; Dr. T. J. Marlow, Frederick city, Md.; David Boyd, Esq., Frederick city, Md.; Ezra Houck, Frederick city, Md.; Samuel Holt, Middletown Valley, Md.; John Clagett, Hagerstown, Md.

The above machines are manufactured in Charlestown, Jefferson Co. Va. All orders addressed to us will be attended to with promptness, and all threshers sent out warranted to come up to the standard.

Mh 1

ZIMMERMAN & CO.

WYR HOUSE, April 14th, 1854.

Messrs. Zimmerman & Co.—Gentlemen: From the trial I gave your Threshing machine and Cleaner, I was pleased with the working, being both fast and clean. It takes more power to work it than a thrasher alone, but this is more than compensated for in the saving of manual labor. I think with the hands necessary to work it, more grain can be threshed and secured, than can be by the same hands, with any other machine I have used. It is well adapted to field work, soon set up and requiring but little fixing to prevent the waste of grain.

May 1

Your obedient servant,

EDWARD LLOYD.

Kentiah's Prepared or Artificial Guano.

Twenty Dollars per Ton.

POTATO ROT.—I have used "Kentiah's Prepared Guano" this season on potatoes. My crop was large and all sound. Where I did not use it, the potatoes were all rotten and worthless. My neighbors, also who have not used the Fertilizer, have not raised a saleable potatoe this year. I consider it a preventive of Rot.

Westchester co., N. Y. Sept. 29, 1850.

G. FREAUT.

At a meeting of the Farmer's Club, at the American Institute, New York, December 1851, the following communication was made:—

I present a specimen of Turnips, raised upon my place last season. The specimen is not the largest grown, although this weighed over 4.3 lbs. I used in the spring of 1850, about three barrels of Prepared Guano to the acre, and planted with Sweet Corn, which produced a large crop. I then cropped with Potatoes, which was also a good crop. After which I put in the Turnip seed without any further manuring than the three barrels above mentioned, and the result was far beyond my expectations.

S. WHITING.

Fairfield county, December 13th, 1851.

Mh 1-3t

THE GREAT PREMIUM FAN.

Patented, December 20th, 1853.

MONTGOMERY'S CELEBRATED DOUBLE SCREEN

ROCKAWAY WHEAT FAN,



Has, during the past year, been proved to be the best Fan ever offered in the Middle States, having taken premiums over all that have been offered to the public from every quarter of the United States. It took the FIRST PREMIUM at the MARYLAND State Agricultural Society's Exhibition, October last, where all the most celebrated Fans were in competition.

THE FIRST PREMIUM at the VIRGINIA State Agricultural Society's Exhibition, in November last, awarded SILVER MEDALS to it, at its Exhibitions in 1852 and 1853, as superior to all others on Exhibition.

THE FIRST PREMIUM was awarded at the Talbot Co. Md. Show, in 1852, and

THE FIRST PREMIUM at the Prince George's Co. Md. Exhibition, in 1853, by the special vote of the Society, in consequence of its superiority and value. It being contrary to the standing rules to award premiums to articles made out of the County.

We annex the following certificate from a respectable firm of St. Mary's Co., and any number of others could be published if necessary, all tending to show the decided superiority of the Fan over any others that have ever been introduced in the Middle States—and as the manufacturers devote their whole attention to this one article, and rely for its continued success on the faithfulness of its make, as well as the superiority of its principles of construction, farmers and others may rely on having their Fans made of the best materials and workmanship.

ST. GEORGE'S, ST. MARY'S CO. MD. Oct. 4, 53.

This is to certify, that I have tried Messrs. J. Montgomery & Bro's. Wheat Fan in some tailings I made in cleaning up of my crop, which I did not think could be made worth anything; it extracted from a bushel and a half of fifth about 100 pecks of pure wheat. I must say that I never saw a Fan that can even come in competition with J. Montgomery & Bro's. Rockaway Wheat Fan, for screening wheat.

Samuel McKen,

All orders addressed to the undersigned, at the Baltimore (Md.) Post Office, will be promptly attended to.

J. MONTGOMERY & BRO.

No. 155 N. High St. between Hillen and Gay Sts. Bal. Jan 1-11"m

Dutchess Swine.

Mr. Editor.—When the Mount Airy Agricultural Institute discontinued I purchased Mr. Wilkinson's entire stock of Dutchess Swine, and have now on hand a number of PIGS of both sexes, and various ages, for sale at reasonable prices.

Jan 1-4"

D. LEAVITT, JR.

FOR SALE.—My FARM in Richmond County, Va. lying on Rappahannock Creek; the creek is navigable within 10 miles for vessels freighting from 2 to 3000 bushels of grain; there are 480 Acres of land—I deem it unnecessary to say more. I presume no one will wish to purchase without first seeing the farm.

ap 1-4"

R. T. A. GRESHAM,

Norment Grove P. O. Va.

LIVE STOCK AGENCY.—In compliance with repeated solicitation, the subscriber offers his services for the purchase of Horses, Cattle, Sheep, Swine and Poultry. His long acquaintance with the different breeds and breeds of these animals, gives him superior facilities for procuring the best.

Mh 1-3t

SANFORD HOWARD,

Office Boston Cultivator, Boston, Mass.

MEXICAN GUANO for sale in lots to suit purchasers by

Mh 1-4"

STIRLING & AHERN,

34 Buchanan's Wharf, 1 door below Pratt's.

NOTICE TO FARMERS AND PLANTERS.—Dr. J. Co. FORWARDING, SHIPPING AND COMMISSION MERCHANTS, Locust Point, Baltimore, Md. will attend promptly to orders for receiving and forwarding GUANO.

Mh 1-3t

DUNLAP & CO.

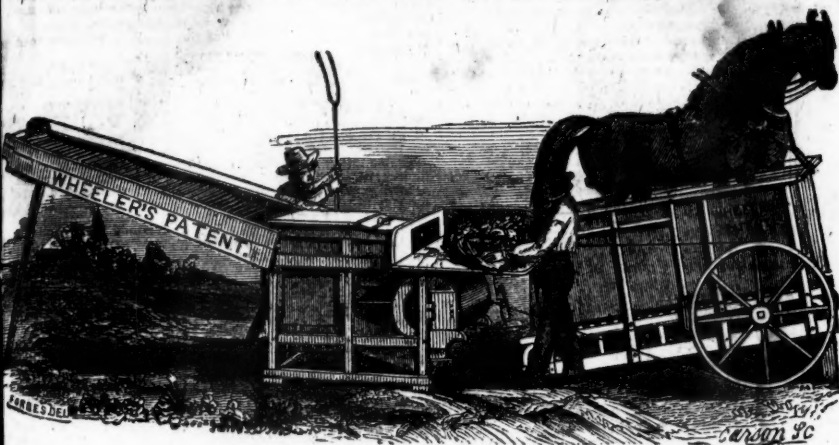
Important to Purchasers of Lumber.

THE UNDERSIGNED having superior advantages in the purchase of LUMBER, can sell Stingers, Laths, Planks, Pickets, &c. at low prices; from the wharf, foot of Elderly's Dock, & opposite State Tobacco Warehouse.

aug 1-1yr

ROBERT HOOPER.

NEW YORK STATE AGRICULTURAL WORKS, By WHEELER, MELICK & CO. Albany, N. Y.



THE subscribers are now making for the trade of 1854, a much larger number of articles in their line, than they have in any previous year, and have made several improvements, which will raise their machines still higher in the public estimation. As the limits of an advertisement will not admit of an explanation of all the advantages of our Machines, and as most of them are so well known as to need no commendation, we will make this statement brief, and for more detailed information, we refer to our printed Catalogue, which will be sent by mail, *postage free*, when requested.

We give our entire attention to the improving and manufacturing of Horse Powers, Threshing Machines, and a few other articles; we feel warranted in assuring the public that they will find each of the following machines unsurpassed:

WHEELER'S PATENT RAILWAY CHAIN HORSE POWERS.

Horse Powers, (represented in the above cut,) are unrivaled for driving all kinds of Farmers', Planters', and other Machinery, which admits of being driven by Horse Power. They are made for either one or two horses, and their superior merits, in point of durability, strength, and ease of running, are fully established; while their compactness and simplicity, and greater height and width of treading floor and stall, give them advantages over other Powers which are highly appreciated by those who have tried them. Several thousands of them are in use, and of which have threshed over 100,000 bushels, and though the present Powers are much improved over the old ones of the same kind, yet the latter are still good. Over 1,000 of them are sold by us and our agents the past season, (a larger number than any previous year,) thus increasing their popularity.

WHEELER'S PATENT COMBINED THRESHER AND WINNOWER.

This machine, (also represented in the cut,) is a late invention. It was got out three years ago, after a long series of experiments, resulting in a machine which performs the three operations of Threshing, Separating, and Winnowing, with as much despatch, and at a few hands and horses, as are required to separate only with other machines, and although designed for so complicated work, it is yet a model of simplicity and facility. The entire running parts are driven by the main shaft and one small band. We have no doubt it is the most perfect machine in use for threshing and winnowing. Driven by two horses, they thresh and clean from 150 to 200 bushels of wheat, or twice that quantity of oats, per day. We give below a list of it from the Valley Farmer, published at St. Louis, and also two letters from gentlemen, who have the Machine in use, showing the estimation in which they are held, and stating that these two are about an average of many other similar letters, which we can show.

[From the Valley Farmer, of August, 1853.]

WHEELER'S COMBINED THRESHER AND WINNOWER.
We take pleasure in saying before our readers the following extract from a letter just received by us from a very respectable individual in Cape Girardeau Co. Mo. in whom we sold one of these Machines, about a week ago, with the understanding that if it did not work to his satisfaction, he could return it to St. Louis, at our expense. It will be recollected that the manufacturer warrant these machines to thresh and clean from 150 to 200 bushels of wheat per day, or twice that quantity of

APPLE CREEK, MO., July 18, 1853.

"Mr. E. Abbott—Dear Sir—I have tried my Thresher and Winnower, and it has given entire satisfaction. I have moved the machine one mile, set it up, and threshed two hundred and forty-two bushels of wheat in one day, and have threshed forty bushels an hour. It works finely, and is considered the best machine to thresh and save grain, in the South. It can't go back to St. Louis. I think I shall thresh from 5,000 to 10,000 bushels of wheat this season. Yours truly,

JAMES F. COLYER.

Another gentleman, to whom was sold our Double Power and Combined Thresher, writing to us from Orange county, N. Y., under date of Dec. 9th, 1853, says:

"I have received the machine, and used it, and it gives the very best satisfaction that could be expected. Yours truly,

HENRY J. HOWE."

Having sold between 300 and 400 of the Winnowers during the past season, we could, if space permitted, give many other testimonials to their utility, but the above must suffice.

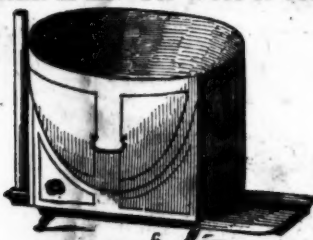
WHEELER'S OVERSHOT THRESHER AND SEPARATOR.

This Machine is also our own invention, and has been in use 13 or 14 years, and its many advantages are appreciated by other manufacturers, as well as the farming public. Driven by our Double Power, it threshes and separates from the straw, from 150 to 200 bushels of Wheat, or twice as much Oats, per day.—The small machine is adapted to moderate sized farms, and as the single Power is sufficient for sawing wood, churning, cutting stalks, straw, &c., and driving almost every kind of Machine used by farmers, and is capable, by changing Horses, and elevating the Power properly, of threshing much faster than we stated above—it is a very popular machine in some sections.—We would also call special attention to our Clover Hullers, Portable Saw Mills, and Stalk and Straw Cutters, either of which are adapted to both our Double and Single Powers. All our Machines are warranted to give entire satisfaction, or they may be returned at the expiration of a reasonable time for trial.

PRICES—For Double or Two Horse Power, Thresher and Separator, including belts, wrenches, and oil cans, complete.....	\$180 00
Double Power alone, including belt.....	120 00
Do. do. without belt.....	110 00
Double Thresher and Separator, alone.....	40 00
Single, or One Horse Power, Thresher and Separator, including belts, oil cans, wrenches, complete.....	125 00
Single Power alone, including belt.....	80 00
Do. do. without belt.....	80 00
Single Thresher and Separator, alone.....	30 00
Clover Hullers.....	30 00
Straw and Stalk Cutters, for Horse Power.....	30 00
Circular Saw Mill, with 24 inch Saw.....	30 00
One Horse Power, without Band Wheel.....	15 00
Churn Gearing.....	5 00
Band Wheel.....	5 00
Double Power, with Combined Thresher and Winnower, including belts, wrenches, &c.....	245 00
Combined Thresher and Winnower alone.....	120 00

Orders are solicited, and will be promptly filled.
Address . WHEELER, MELICK & CO.
Albany, N. Y.

The Best Cauldron Furnace or Agricultural Boiler in use.—For Wood or Coal.



**MACGREGOR'S PATENT
CAULDRON FURNACES,
OR
AGRICULTURAL BOILER.**

THE SUBSCRIBERS have made arrangements with **JAMES MACGREGOR, JR.**, for the exclusive privilege of Manufacturing and selling his *Patent Cauldron Furnaces* for the entire Southern country.

These Cauldron Furnaces are so constructed, that they take less than one-half the fuel (either wood or coal), to accomplish the same amount of work, than any other article for a like purpose, either set in Iron or Brick.

They boil equally as quick in front as back, consequently they are admirably suited for all purposes which require an equal and governable heat. The appearance is of the most approved style, and having been in use and thoroughly tested for the last six years, we can warrant them with certainty.

Farmers wishing to have boiling going on during the night, so as to have potatoes and other articles ready for use in the morning, can do so with this Cauldron Furnace to their entire satisfaction, and thereby effect a saving of much time and trouble over any other article of the like purpose ever before offered to the public. This is done by means of a damper at the bottom of the pipe, by drawing which after the usual amount of fuel has been ignited, the liquid will continue to boil for from three to five hours without any further attention from the operator. Any person purchasing any of the above article can try it for thirty days, and if in his opinion it does not fully sustain the above recommendations, he is at liberty to return the same, free from any deductions; and the money will be refunded in full. For sale, wholesale and retail, by

**ROBBINS & BIBB,
Baltimore Stove House,**

39 & 41 Light Street, below Lombard.

The following are our agents of whom the above may be had.
Fitzhugh Coyle, Washington, D. C.—E. M. Linthicum, & Co., Georgetown, D. C.—R. S. Huek & Co., Alexandria, Va.—Wm. Palmer, Richmond, Va.—Rowlett, Hardy & Co., Petersburg, Va.—A. Nucton & Son, Winchester, Va.—D. G. Blair, Cumberland, Va.—J. H. Bradley, Fredericksburg, Va.—Borum & Fisher, Norfolk, Va. Nov. 1.

SUPER PHOSPHATE OF LIME.

THE EAGLE CHEMICAL WORKS, of New York, through their agents, **R. R. GRIFFITH & SON**, No. 94 Spear's Wharf, Baltimore, offer for Sale this invaluable manure, as a top dressing. It is strongly recommended, the season being now at hand.

The Super Phosphate has been tried on every variety of roots, and garden crops, with invariably success, and at the advanced price of Peruvian Guano, is now conceded to be the cheapest, and most valuable manure sold. Price \$45 per ton of 2000 lbs. or 2.25 per 100 lbs. mh 1-1tf

To Farmers and Traders,

THE subscribers, grateful for the very liberal patronage of their country friends, beg leave again to claim a full share of their future patronage and custom. They are prepared with the very best material and are determined to spare no pains to give entire satisfaction, as regards price and quality, in the manufacture of Ploughs, Harrows, Cultivators, Wheat Fans, Straw Cutters, Corn Shellers, Corn and Cob Crushers, Horse Powers and Threshing Machines, Reapers and Mowers, Wheat and Seed Drills, and Machinery of every description and pattern approved by farmers. Also, CASTINGS, by the ton or smaller quantities, with a liberal discount for cash.

Country Merchants and Southern buyers are requested to give us a call before going East.

COTTINGHAM & JOHNSON,
mh 1-6t 150 Pratt St. Wharf, cor. Hollingsworth St. Balt.

COTTINGHAM & JOHNSON, Manufacturers and Dealers in **AGRICULTURAL IMPLEMENTS**, of all kinds, are again the appointed Agents of **C. H. McCormick**, for the sale of his **REAPERS and MOWERS** and **GRASS MACHINES**. These machines have been again improved and strengthened. They can now be recommended to the farmer as the very best machine of the kind. (P—Please send orders early, to secure Machines.

COTTINGHAM & JOHNSON,
mh 1-6t 150 Pratt St. Wharf, cor. Hollingsworth St.

HUSSEY'S REAPER AND MOWER.

THE farmers of the Southern and Middle States have been their principal customers. To get a good Reaping Machine has been their main object, but at the same time it has been very desirable with many of them that the same machine should cut their grass also without the necessity of incurring the expense of another machine for that purpose. With this view I have for several years constructed many of my Reapers in such a manner, that by a slight alteration they became Mowing Machines. Although it has been well understood by farmers that such machines could not be as good mowing machines as when made expressly for grass, yet they were generally satisfied with the defect, in consideration of its being a good Reaper. My manufacture has been hitherto confined to such machines, and I am now called upon for machines exclusively for mowing, and am now for the first time making extensive preparations for a large supply of **MOWING MACHINES**, as well as **Reapers** for the ensuing season.

These machines will be warranted superior to any thing of the kind yet made. Those who wish machines exclusively for mowing may rely on having my latest improvements; whereas of my recent experience both in this country and in Europe, great pains is taken, and at a greatly increased expense to procure iron from the most celebrated iron works in the country. The first Prize was awarded to my Reaper at the **Bull and West of England Society**, held at Plymouth, in June, 1853, over the other American Reaper; and at the meeting of the **Royal North Lancashire Agricultural Society**, held at Blackburn, August 25th, 1853, the Medal was awarded to my Mowing Machine, over an American Mowing machine, for which extraordinary claims have been made for superiority.

Those who wish the Mower and Reaper combined can be supplied as usual. **OBED HUSSEY.** Feb. 14

I have seen a printed circular lately issued in this city, in which it is stated, that the Reaper, which I sent to the trial at **Carl's Neck**, in June last, was made "expressly for the occasion." This is not correct. The machine made for the trial was sent to **Nottoway County**, where it was supposed the trial was to take place. In consequence of the change of place of trial, I had only time to send such a machine as I endeavor to send to all my customers, and of course a good one. The object of the circular seems to be, to show that the high stand my Reaper obtained at the trial at **Carl's Neck**, was entirely owing to its having been made "expressly for the occasion," and that one of my ordinary make would have failed. Those who avail themselves of my original invention, should endeavor to enjoy its benefits modestly, and without an attempt to injure me. mh 1

O. E.

SUPER PHOSPHATE OF LIME, OR CHEMICAL MANURE, in bags of 150 lbs. each, manufactured and sold by **WM. PATTERSON**, Davidson St. Wharf, Newark, New Jersey.

P. MALCOLM & Co., Bowly's Wharf, are the Baltimore Agents. aug 1-6.

AGRICULTURAL IMPLEMENTS.—LABOR SAVING MACHINERY.—**GEORGE PAGE & CO.** Machine and Manufacturers, Baltimore, St. West of Schreder St. Baltimore, are now prepared to supply Agriculturists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in their line. They can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from \$55 to \$125, each simple, strong and powerful. Their *Horse Power and Threshing Machine*, they are prepared to supply at the low price of \$125 complete; the *Threshing Machine* without the horse power, according to size, at \$30, 40, 65 and 75; improved Seed and Corn Planter; Portable Tobacco Press; Portable Grist Mills complete. \$165. Feb 1

JAMES BAYNES, Wool Dealer,

Warehouse No. 105 Lombard st. near Calvert, Baltimore.

IS prepared at all times to give a fair market price for WOOL of all descriptions. He would recommend to farmers to be more particular in washing their Wool, and in putting it in good order before bringing it to market, to secure them a fair price. The demand is good, and the probability is, that it will continue so the coming season. Those having wool to dispose of, are invited to give him a call before disposing of their fleeces. Any information as to putting wool for market, &c. will be freely given.

References.—B. Deford & Co., and Wethered Brothers, Baltimore.—Jas. Mott & Co., and Houston & Robinson, Philadelphia. Ap. 1-18

E. WHITMAN & CO'S. PREMIUM WROUGHT IRON RAILWAY Horse Power and Threshing Machine.



The great success that has attended this machine the past ten years has caused men without principle or genius, to attempt an imitation of it, and Farmers and Dealers have been deceived and disappointed by the purchase of spurious machines, supposing they were the same as ours. We now wish it understood by all who intend to purchase this machine, that besides ourselves, there is not a man in the United States who manufactures our Wrought Iron Railway Horse-power and Thresher. We have been engaged in the manufacture of this machine for more than ten years, without the slightest change of principle, during which time scores of Railway Powers have been introduced by the side of ours, and have been tried, condemned and abandoned as being worthless. One evidence of the superiority of our Railway Power over all others, is the fact that some manufacturers who ridiculed our Railway Power a few years ago, are now trying to imitate it. The public will be their own judges of how much confidence should be placed in the judgment and honesty of such people.

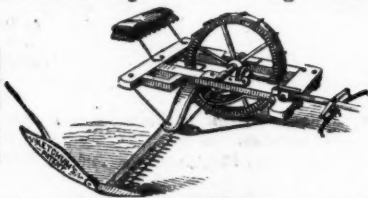
For the year 1854, and until further notice the prices will be as follows, viz :

Best Wrought Iron Double Railway Horse-power,	\$ 115 00
Best 24 inch Iron Cylinder Thrasher, including Wrenches,	60 00
Straw Carrier,	15 00
Band,	10 00

(5 per cent. will be deducted from the above prices, if paid for on delivery.)

\$200 00

Ketchum's Improved Mowing Machine.



PRICE, \$1.25.

This machine will cut all kinds of grass and operate well on uneven or rolling lands, or where there are dead furrows. This Mower received the highest award, with special approbation, at the World's Fair; it also received, during last season, one silver and four gold Medals and various other flattering and substantial testimonials of approval.

These Machines are capable of Cutting and spreading, with one span of horses and driver, from ten to fifteen acres per day of any kind of Grass, and do it as well as is done with a scythe by the best mowers. For sale by E. WHITMAN & CO.

SEPARATOR.

This Machine threshes and cleans all kinds of grain in the most perfect manner. It is manufactured by the undersigned at their Works in Baltimore, and is considered superior to any machine for the above purpose. Persons wanting a machine to thresh and clean at one operation, need only to examine this to become satisfied of its superiority.

Price of Large size,	\$200 00
" With Horse Power,	325 00
" Small size,	125 00
" With Horse Power,	225 00

ZIMMERMAN & CO'S. HORSE POWER AND SEPARATOR will be furnished by us at their regular prices.

10,000 PLOUGHS, HARROWS & CULTIVATORS—at prices as low as can be had in the United States, and of superior quality. E. WHITMAN & CO.

Grant's Fan Mills and Grain Cradles,
At his Lowest Wholesale Prices. For sold by
E. WHITMAN & CO.



We are now manufacturing and offer for sale
 Geared Horse Powers, No. 2, with 25 inch
 rubber, Straw Carrier, Belt, &c. complete.

Price, 190.00
 Do. No. 3 with same attach-
 ments, 220.00
 Geared Do. with same attach-
 ments, 205.00

Either of the above sets, Extras
 should be taken, amount of 10.00
 If larger or smaller Thrashers are sent, with
 our Powers, the price will be more or less in
 proportion.

FANNING MILLS,

With all the late improvements, and warranted
 prior to none in this country; Price, 25 30, \$35.

Rail Way Powers,

1 and 2 Horses. These will drive a 16 and 20
 Thrasher, which with Belt complete, will cost
 and \$167.

Grain Cradles.

With Wood brace with warranted as this
 attached, 4 and \$5.
 Hay & Grain Rakes, 8 and \$11.
 And other Harvest Tools, a general assort-
 ment.

Reapers and Cultivating Plows—a great variety
 suited for all lands and crops.
 And plain Rollers, at 35, 40, 45 and \$50.

Murray's Reaping & Mowing Machines,

Manufacturer's price. Price, \$100 and \$140.
 New Propellers or Patent Cylindrical Straw Cut-
 ters—4 sizes, and price 25, 30, 40 and \$45.

The Propeller Machine is warranted the
 best known.

Our Patent, and various other cheap Straw Cut-
 ters, at 5, 7, 10, 12 and \$20.

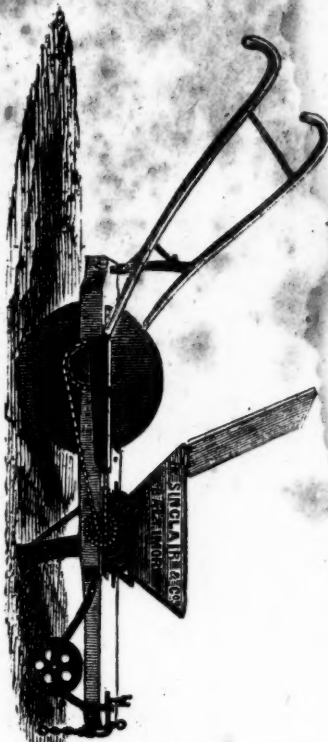
Domestic Corn Mills, 20 inch to 4 ft. Those pre-
 ferred for Plantation use, 110 and \$135

Iron & Iron Pumps, Garden Engines, Agricultural
 Sifters. Also manufacturing 100 Wheat Drills,
 made on the most approved and simple plan.

Price, 65, 75 and \$90.

R. SINCLAIR, JR. & CO.

CORN DRILL.



This Fig. represents our improved Corn Drill,
 which is now in very general use in Virginia and
 North Carolina. It rates with *implements per-
 fect* and recommended to all those who plant Corn
 extensively.

Price, \$21 50. R. SINCLAIR, Jr. & Co.

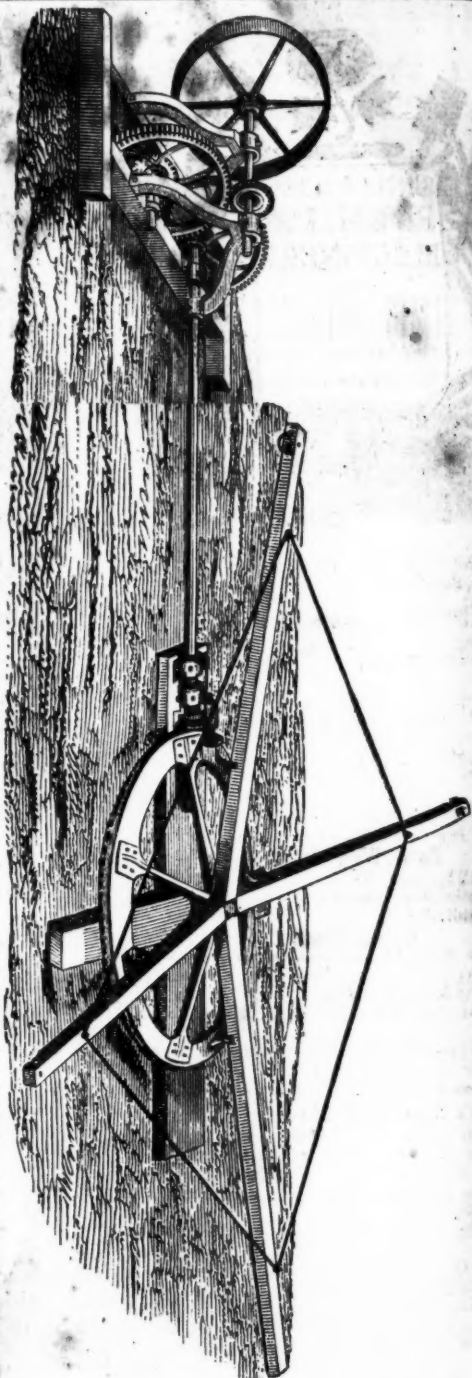
Reading's Patent Horse Power CORN SHELLER & CLEANER.

ROBERT SINCLAIR, JR. & Co. have
 purchased the right for this County, a part of
 the Western Shore of Maryland, and the Southern
 Counties of Virginia and North Carolina; this val-
 uable machine is admirably adapted for large Corn
 Planters, and the best Horse Power machine known.
 It is estimated to *shell, cob and clean*, in perfect or-
 der, for market, 1500 or 2000 bushels of Corn per
 day.

The works are remarkably simple, the machine
 being made without springs, or cog gearing, and in
 every respect a machine particularly desirable for
 shelling large crops, and what is now wanted for
 shelling corn by the large growers in North Caroli-
 na, Virginia, and Maryland.

R. SINCLAIR, JR. & CO. have in Store
 Field & Garden Seeds—including several
 Casks Sugar Beet & Mangel-wurtzel, Ruta Baga,
 Hybrid Turnip, Field Carrot, &c., &c. may 1

Sinclair & Co's Improved Segment Horse Power.



The Horse Power represented by the above Fig., is constructed on the stationary principle, having all the advantages of the stationary, and forming one of the best Portable Powers in use. The drought is remarkably light and the main wheel being formed of segments, renders (in the event of breaking a cog) them easily and cheaply repaired, also by this arrangement the wear is less in comparison with the spur geared power—consequently more desirable. Attached to each, are three projecting shafts for Band wheels, by which every required speed can be attained for any machine that it may be desirable to run. Price, complete as represented, \$125.00

No. 2 Spur Geared Power, with late Improvements, \$110 00

No. 3 do do a powerful machine and greatest capacity, \$140 00

RAILWAY OR ENDLESS CHAIN POWERS, for 1 and 2 horses, \$85 and \$110 00
Our Threshing Machines are made with open wrought iron Elastic Cylinders, thoroughly bolted and fastened, and in every respect strong, durable and efficient. Width of Cylinder, 16, 20, 25, 30 inches. Prices, 40, 45, 55, \$65. Straw Carriers for Ditto, 15, 18 & \$20. Driving Belts, 40 ft. by 4 in. \$12.
WHEAT FANS, of three sizes, Price, 25 30 and 35,—those at \$30 are generally sold, and combine all the late improvements, both as regards finish and effect.

GRAIN CRADLES made with iron and wood braces, with warranted Scythes attached; Price, 4 a \$5.
Also, Horse, Hay and Grain Rakes, Wood and Steel Forks, and Harvest tools of every description.

For MACHINERY not mentioned, see general advertisement in another part of this paper.

ROBERT SINCLAIR, Jr. & Co. Manufacturers, Baltimore.

NEW BRICK MACHINE. NOW IN SUCCESSFUL OPERATION IN BALTIMORE

IT is so simple that any intelligent negro can learn to manage it in two or three days. You have merely to shovel clay into a box, and attach a horse to the sweep. The machine sweeps the clay, and moulds the bricks in the most perfect manner, such as the most experienced hand can scarcely equal. When burned, they are found to be stronger and more solid than those made in the usual way, because the clay is worked closer under the pressure of the screw, than it is possible to mould by hand. For a machine driven by steam, the clay is taken direct from the bank and passed through a pulverizer, which removes the stone and prepares it for the soak pit. Supporting the clay at hand, nine men and three boys will mould 1,500 bricks per hour. Price, \$500. A five mould machine, worked by a horse, with four men and four boys, will make 1000 bricks per hour—Price, \$300. A four mould, with the same force, will make 800 bricks per hour. Price \$250. Obtained gold medal from the Maryland Institute, 1853; premium from the Maryland Agricultural Society, 1853.

For further particulars, in a Pamphlet containing full instructions on Brick Burning, address
Dec 1-1/2 FRANCIS H. SMITH, Balt.

YOUNG GIFFORD.



ONE of the finest colts of the celebrated Old GIFFORD MORGAN—dam, by Billy, the well known Roq horse; grand dam by Old Justin Morgan, out of a Morgan Mare.—Six years old the 20th May last—of a rich dark, and deeply settled chestnut color.—Will stand next season, commencing 1st April, at Birch's Stable, 14th Street, Washington City—at C. Hope, near Washington, and in Alexandria, Va., and at Stables of the subscriber. \$20 the season, and \$30 to insure. —Particulars in small bills.

aug-1-lyr

WM HENRY DAINGERFIELD,
Wood Cot, Md. near Alexandria, Virginia.

AGENCY FOR THE PURCHASE AND SALE OF IMPROVED BREEDS OF ANIMALS.—Stock Cattle of the different breeds, Sheep, Swine, Poultry, &c. purchased to order and carefully shipped to any part of the United States—for which a reasonable commission will be charged. The following are now on the list and for sale viz:

Thorough bred Short Horns and Grade Cattle

Do do Alderney do do
Do do Ayreshire do do
Do do Devons do do
Do do South Down sheep
Do do Oxfordshire do
Do do Leicester do

Swine and Poultry of different breeds.

All letters, post paid, will be promptly attended to. At-
AARON CLEMENT.
mh) Cedar st. above 9th st., Philadelphia.

YOUNG HEROD.



THIS celebrated horse and pure Foal getter, (by many urgent request) will stand the ensuing season, commencing April 1st, and ending July 1st, as follows:—On Mondays, at Troy Hills farm, on the Washington Turnpike, at the 10 mile stone.—On Tuesdays, and Wednesdays at Mr. Walter Dorsey's 16 miles on Frederick road.—Thursdays and Fridays, at Owings' Mills.—Saturdays, through Ann Arundel County.

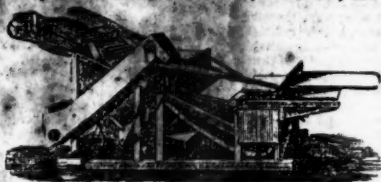
The terms will be \$10 cash for the season—\$15 insurance; if not complied with during the season, there will be an extra charge of \$2. Parting with the mare will forfeit the insurance.

PEDIGREE.—Young Herod is a rich dark bay, superior action and power, has paced a mile without training in 2 minutes 55 sec. and trotted in 3 minutes 16 sec.—Was bred by Jonathan Dorsey, of Carroll Co. Herod was got by Herod, owned by Edw. H. Dorsey, of Hunting Ridge, his dam of the Tom and Canadian stock; Dorsey's Herod, by Wild Herod, dam of the Tom and Leopard stock of Wild Herod, by Imperial Herod, imported by Col. Hixon, of Washington Co., Md.—Wild Herod's dam by Liberty, out of an American mare. There have been many fine race horses from old Herod, and more fine saddle horses, than from any other imported horse on record. He received 1st Premium at the Maryland Agricultural fair and Cattle Show, in 1853. It is deemed unnecessary to say more of him, as he is well known, and will show for himself.
R. H. EDWARDS. mh 1

CHARTER OAK GRAPE is the largest Grape in the world—of delicious flavor—perfectly hardy, bearing large bunches, and ripens the middle of September—the berries measuring over an inch in diameter, and being an American seedling, comes highly recommended. Plants for sale by
ap 1-4t JOHN FEAST, Agent,
295 Lexington street, Baltimore.

Agricultural Implement Manufactory.

Corner of Carotins and Third sts., BUFFALO, N. Y.



PITTS' PATENT SEPARATOR.

IMPROVED DOUBLE PINION HORSE POWER.

Pitt's Corn and Cob Mills, &c.

I HEREBY give notice, that since the extension of the Patent Right on my Machine for Threshing and Cleaning Grain, I have removed to Buffalo, N. Y., where I have permanently located, and erected a large establishment for the future manufacture of the above machines.

The Separator has been enlarged, improved, and rendered more permanent and durable in all its parts, while the Horse Power, for strength, ease, durability and cheapness of repair, is not surpassed by any in the United States. This Power is warranted to stand the full strength of 8 horses, also to give as much effective or useful power, when driven by one or two horses, as any other Horse Power, whether constructed on the endless chain or lever principle. It was put on trial at the great Exhibition of Horse Powers and Threshing Machines, at Geneva, July last, 1853, where it received the New York State Agricultural Society's first premium "for the best Horse Power for general purposes." The Separator, at the same trial, also received the Society's first premium.

My Machines will thresh and clean from three to five hundred bushels of wheat per day, and other grain in proportion.

Two hundred of the above Machines are for sale at the Agricultural Works of the subscriber, in this city, all warranted to be a better article than can be purchased at any other shop, and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers, at the price they may pay me for them.

I further notify all persons who are purchasing Horse Powers and Separators, to be used in California or Oregon, that I will hold them accountable for any infringements of the rights secured to me by letters patent in the above machines, as I am manufacturing a Horse Power and Separator expressly designed for that section.

All orders for the above Machines hereafter, addressed to John A. Pitts, Buffalo, N. Y. will receive prompt attention, or to my authorized Agent, Mr. O. F. WALLACE, at Richmond or Winchester, Va., who now has a fall of the above Machines for sale at both places.

My Agent, O. F. WALLACE, who has sold a large number of the above machines in Va., during the past three years, is now permanently located at Baltimore, Md. where I have established a depot for the sale of those justly celebrated machines. Persons desirous of examining before purchasing, will please call on O. F. WALLACE, No. 90 S. Charles St. Baltimore, and all orders addressed to him as above, will receive prompt attention.

ap 1-ly

JOHN A. PITTS.

PERUVIAN GUANO.

THE UNDERSIGNED, AGENTS of the Peruvian Government for the importation and sale of Guano into the U. S. beg to inform the public, that in pursuance of orders received from the said government, the price of guano has been advanced to the rate of \$50 per ton.

Any duties or charges imposed by the laws of the different States in which it may be imported to be paid by the purchaser. Baltimore, 17th January, 1854.

feb-1

R. BARREDA & BROTHER.

DINSMORE & KYLE,

GROCERS & COMMISSION MERCHANTS,

No. 156 Pratt Street Wharf, Balt.

OFFER their services to the Agricultural community for the sale of GRAIN, and other Produce. Strict attention will be paid to the weighing of Grain. They will also purchase Guano, and other manures for a moderate commission.

They invite attention to their stock of GROCERIES, LIQUORS & WINES, (many of the latter, very old, and of rare qualities,) all of which will be sold on pleasing terms.

To any business entrusted to them, they promise their best efforts.

Feb. 1-1 yr.

BONE DUST AND POWDER

WARRANTED (free from any mixture—no glue extracted, or any Chemicals used, leaving the Bone Dust in its natural or pure state, weighing from 55 to 60 lbs. per bushel, at 50 cts. per bushel, in December, January and February—the balance of the year at 55 cts.

The Powder is as good as can be made, and for sale low.

REFERENCE.—D. M. Penick; J. V. Lumsan; J. Tyson Jr., and J. W. Randolph, Baltimore County; Wm. B. Stephenson, and Lloyd Norris, of Harford County; William Baker Dorsey, and Dr. Allen Thomas, of Howard County; C. Siabler and William B. Bond, Montgomery County; A. N. Bernard, and Maj. Lee, Va.

Orders left at the American Farmer office will be attended to.
Jan. 1. THOMAS BAYNES.

BLACK HAWK TICONDEROGA

WILL make a Spring Season at Goeanstown, Baltimore Co. about 4 miles from Baltimore, on the York Road, commencing on the 30th of March; he will be permanently at that place, as no engagements will be made for him elsewhere.

This Horse took the First Premium at the Maryland State Show, in 1883, and for 1884 in the class of Premium Animals. He also took the first premium at the Virginia State Show, in November, 1883—thus establishing his character over any horse in the Middle States.

For further particulars, reference is made to hand-bills, description of the Horse, pedigree, &c.—and for terms, apply to KLIN FELTON.



TO FARMERS.

THE undersigned, by this method, would appraise the Agricultural community, that he is still engaged in the manufacture of the renowned *Wiley, Empire*, and other choice Plows. He also manufactures and has for sale, a number of the best and most efficient Farming Implements in use. Call before purchasing elsewhere, as his terms are such as cannot fail to please. All implements guaranteed.

Agents for the *Wiley, Empire*, Boston, Woodstock and other Plow Castings. A. G. MOTT.

At the old stand, No. 38 Ensor, street, and at No. 51 N. Paca street, opposite the Hand Tavern, Balt. mh-1.

Bone Dust.

The subscriber will furnish ground Bones, warranted free from every mixture, or the entire quantity forfeited. He has lately made such an improvement in his machinery for crushing bones, as to enable him to sell an article better than ever before offered, a sample of which can be seen at the office of the American Farmer. My Bone Dust weighs, from the manner in which it is manufactured, 55 to 60 lbs. per bushel. Price 60 cts. per bushel, of 200 lbs. I guarantee it to weigh 55 lbs. at least to the bushel. My Bone Dust is the finest made in Baltimore.

None of my manufactured, Bone Dust is sold, except at my Factory. JOSHUA HORNER.

Corner of Chew and Ensor sts., Old Town, Baltimore, or orders may be left with Mr. S. Sands, at the office of the American Farmer.

I furnish to my customers, when bags are not sent, 2 bushel bags, 6 1/2 cents each.

Reference.—Messrs. Randolph, Golbart & Co., 159 Thames street. mh-1-1f

FOR SALE.—A tract of LAND, containing 166 acres, lying in Machodoe Neck, immediately on Nomini Creek. A part of this Farm has been limed and ditched, and there still remains a great number of acres upon it, with the fine wood on the Farm, may easily be converted into lime. There is a good Apple Orchard near the House, and a never failing Spring within one hundred yards. The House has recently been repaired, and contains four rooms, with the necessary Out-houses. The Nomini abounds in fine fish, oysters and wild fowl. For further particulars, address the subscriber, Mague P. O. Westmoreland Co. Va. WM. D. NELSON.

Mineral Phosphate & Bi-Phosphate of Lime.
THIS manure is applicable to all soils that are deficient in Phosphoric acid, a deficiency which exists when the land has long been cultivated without restoring the Phosphates which have gone to form Bones, Milk, and other animal secretions. It is chemically identical with Bones, in a much more convenient form—is the valuable constituent in Guano—is cheaper than Bones or Mexican or Patagonian Guano, and reduces the cost, whilst it increases the permanency of the effect of Peruvian Guano.

The Mineral Phosphate of Lime has now been sufficiently tested to prove that it is the cheapest and most convenient fertilizer within the reach of the Farmer and Planter. The price is dependent on the proportion of Phosphoric acid. The present supply is sold at \$20 per ton of 2,000 pounds for the Phosphate, and \$30 for the Bi-phosphate, or Super-phosphate, formed by combining the powdered mineral with sulphuric acid, answering to dissolved bones.

EVAN T. ELLICOTT,
Lombard street, near Hanover.

HORNER'S PREPARED ANIMAL MANURE

THE subscriber asks the attention of the farming community to the following analysis by Dr. Jas. Higgins, State Chemist, and comparison between his prepared Animal Manure, and Patagonian and Peruvian Guano. It is necessary for a full understanding of the comparison, to state, that his Compound costs but 60 cts. per bushel, or 412 per ton. This preparation has been used with much success on the tobacco crop, and testimonials from Mr. Reynolds, Mr. R. H. Hare, Col. Bowie, and other well known planters and farmers, who have purchased it for Corn, Wheat, Tobacco, and spring crops generally, can be produced as to its efficiency, by practical tests. The bones used in the Animal Manure are now dissolved with sulphuric acid, which was not the case heretofore.

Put up in barrels at \$3 per barrel.
Apply at the corner of Chew & Ensor streets, Old town, Baltimore.

JOSHUA HORNER.
LEONARDTOWN, OCT. 7th, 1881.
To Mr. J. HORNER, Baltimore.—Dear Sir:—Below I send you a statement of your Manure as to its essential valuable constituents, and the relation which it bears to Patagonian Guano. A ton of your Manure contains of

Ammonia, 54-100 pounds
Phosphate of Lime, 638 do

The average of Patagonian Guano by the ton, as it is sold, contains of

Ammonia, 80 pounds
Phosphate of Lime, 800 do

Estimating Patagonian Guano, and your Manure by the same rule as to the value of the several constituents, the Patagonian Guano would be worth \$19.30 per ton, and your Manure \$14.44. If Patagonian, therefore, be worth \$38 per ton, your Manure is worth about \$28.50 per ton.

THE VALUE OF PATAGONIAN GUANO AND YOUR MANURE, I DETERMINE BY THE AGGREGATE VALUE OF THEIR SEVERAL VALUABLE CONSTITUENTS, and by the same rule which would make Peruvian Guano worth \$46 per ton. Your Manure also contains 122 pounds of Gypsum, 114 pounds of Salts of Potash and Soda, and 300 pounds of Lime to the ton, being about equal to Patagonian Guano, of average quality, in these constituents.

Very truly yours, &c.
JAMES HIGGINS, St. Ag. Chemist.
P. S.—You can make what use you please of this. mh-1

GUANO AGENCY.

IN consequence of heavy advance in the rate of Freight and other expenses, the Peruvian Government has advanced the price of No. 1 Guano to \$50.20 per ton of 2240 lbs.—at which rate orders will be filled at a charge of 1 per cent. commission, purchasing and forwarding. As the Agency will not sell less than 50 tons a uniform charge of \$1 per ton will be made for all smaller quantities. When taken from the vessel or warehouse of the agent a saving of drayage can be made.

MEXICAN GUANO and other fertilizers purchased, and Seeds, &c. B. M. RHODES, General Commission Merchant, Feb 1 123 W. Lombard street, near Charles.

A. E. WARNER, No. 10 N. Gay st.

MANUFACTURER OF SILVER WARE, FINE GOLD JEWELRY, and importer of BEST SILVER WRE, FANCY ARTICLES, &c. would respectfully invite the attention of those in want of any of the above articles, that he keeps always on hand, and makes to order, every variety of Silver Ware, fine Gold Jewelry, and best quality Silver Plated Ware, which he will sell on the most accommodating terms. Feb. 1-1f

PIANO FORTES.

THE subscriber is now constantly receiving new supplies of first class Piano Fortes from the celebrated factories of Chickering, Boston, and Nims & Clark, New York, with all the important improvements.

These Pianos are all made in the most substantial manner, and are particularly calculated to stand the most severe climates, being manufactured from the best and most thoroughly seasoned materials.

Orders from the country will be as fully and faithfully attended to as if the parties were personally present.

F. D. BENTEN,
181 Baltimore Street, near Light Street.
Also ROSENKRANZ'S GERMAN PIANO FORTES, with full Iron Frames—equal to any in the market. Nov 6-10

SEED SWEET CORN.

EXTA Early Sweet Corn.—The earliest Sweet Corn in cultivation, and one of the best, 50 cts. per quart.
Mammoth Sweet Corn.—Approved standard variety, good and productive, 12 1/2 cts. per quart, \$3 per bushel.

Stowell's Evergreen Sweet.—An excellent, very productive, late variety, 25 cts. per quart, \$5 per bushel, 50 cts. a dozen ears.

Old Colony Sweet.—A similar variety to the last, pronounced by the Massachusetts Horticultural Society the most delicious kind cultivated—25 cts. per quart, \$5 per bushel, 50 cts. per dozen ears.

Orange Orange Seed.—Growth of 1853, 75 cts. per quart, and at reduced rates where a quantity is taken.

J. M. THORBURN & Co.
ap 1-2f 15 John St. New York.

A CHOICE FARM FOR SALE.—The owner of the above property being aged, and wishing to retire from farming, will dispose of his farm, lying in Howard County, Md. within three hours ride of Baltimore, and a few miles of the Baltimore and Ohio Railroad. The farm contains 637 acres of land, in a fine state of cultivation—370 acres being in timber. The farm is situated in a choice neighborhood, and surrounded with well cultivated farms. Can be divided into 2 or 4 farms, is well supplied with necessary buildings, water, &c. It is a rare opportunity to obtain a superior home-stead. **FRANK WILKINSON, Esq.,** Terms very favorable. Buys of **Wm. L. RICHARDSON, Esq.,** Cash'r. Citizens' Bank and **SAMUEL SANDS, Esq.,** of American Farmer, Baltimore. For particulars address (post paid),
ap-14f S. BENTZ, near Hoods Mill, Md.

FOWLS.—Mr. CHARLES EMBERTON, Dover, N. H. is ready to furnish his customers and others who may wish pure bred Fowls of all the popular breeds, among which are to be found

Brahma Pootras.	Sumatra Ebon Games.
Imperial Chinese.	Do Phasant do.
Hong Kong.	Wild Indian do.
Black Shanghaes.	Indian Mountain do.
White do.	English do.
Buff do.	Irish do.
Palmer do.	Mexican do.
Black Bantams.	Java do.
do. do. do.	do. do. do.

Also, superior SUFFOLK SWINE. ap-2t

Pure Bred Stock at Private Sale,

AT Mount Fordham, Westchester Co., New York, eleven miles from City Hall, N. Y., by Harlem Road Cars. Having met with more success than I anticipated the past year, with the sale of male animals at Private Sale, is the reason for offering this lot of animals, and my June sale by auction, will not take place. A full descriptive Catalogue with prices attached, will be published on the 15th of April, and I intend to be at home myself to see any who may call. I will sell at private sale, about 18 Short Horns, 6 of which are young Bulls and Bull Calves. The Cows and Heifers old enough, will be in calf, to the Celebrated Imported Bull "Balco" (1818), or imported "Romeo," winner of the first Prize at Saratoga, in 1835, and also at American Institute the same year.

The young Bulls and Bull Calves are some of them from imported Cows, and sired in England; the others are sired by the Imported Marquis of Carrahan. (1818), winner of the first Prize at Saratoga, the past year, as a two year old.

Also, about 10 head of Devons, consisting of a yearling Bull, sired by Major, and 8 Bull Calves, sired by my imported First Prize Bull, "Frank Quarry," and several of them from imported Cows. The Cows and Heifers old enough, will be in calf to "Frank Quarry." Also, 6 or 8 Suffolk Sows, and several young Duroc and Essex Boars. Also 2 Southdown Rams, imported direct from Jonas Webb, and 6 yearling Rams, all bred by me from stock on both sides, imported from Jonas Webb. Catalogue will be forwarded by Mail, if desired.

All animals delivered on Shipboard, or Rail Car in the city of New York, free of expense to the purchaser. The Devons are at my Herdsdale Farm, 12 miles north, to which place I will take persons both to and from.

My friend Mr. N. J. BECAR, who is interested in several of my importations, will have a sale of SHORT HORNS, consisting of 4 young Bulls, and 5 or 6 females. His young Bulls are also several of them from imported Cows, and sired by the Lord of Eryholme. (1826), and the celebrated first prize imported Bull Romeo. Mr. Becar's Cows and Heifers are in calf to the imported Bull, Marquis of Carrahan. (1818). Mr. Becar can be seen at his Store, No. 187 Broadway New York, at which place he will make arrangements to go to his Farm at Smithtown, Long Island. His animals will be entered in the same Catalogue with mine, which can be obtained by addressing him at his Store, or at Mount Fordham. His animals will be delivered in the same manner as mine. Our importations have been in almost all cases made at the same time, and are of equal merit, excepting that I have more in number. **TERMS, Cash on delivery.**
ap-14f L. G. MORRIS.

Brett's Gentlemen's Furnishing Store, Right on the corner of Baltimore and Light Streets.

FOR SALE, AT ONE PRICE ONLY,

Shirts, Stocks, Ties, Collars,
Gloves, Scarfs, Suspenders, Half Hose,
Handkerchiefs and Cravats, ready hemmed,
Under Shirts, Drawers, Toilet Articles, &c.
Heinrich's patent Tailor's Shear, Firmers, and Point

Agency, at patentee's prices. These superior articles will be found invaluable in cutting or serving out clothing.

Strangers will find in our store, and in the One Price System, the best guarantee of paying no more than others, and also of buying at a fair price, as to secure trade and carry out our rule, success will be most assured, as any one can afford to dispose of like goods, of the same quality.
may 14f

Valuable Farm For Sale,

NEAR NORFOLK, VA.—For sale, a very valuable Farm, about 9 miles from Norfolk, situated on a navigable stream, by which the products can be shipped directly from the place, and in two hours placed alongside of the Norfolk wharves. It contains 2,900 acres, the land rich and easily tilled, about 500 of which is cleared and in high state of cultivation, producing on an average six barrels of Corn to the acre. The remaining 1,500 acres is heavily timbered with oak, poplar, holly, gum and pine. There is an excellent and commodious DWELLING, with all other necessary Out-houses, Barns, Stables, &c. in good order, upon the place, together with a good stock of the various descriptions of Fruit Trees, &c.—Apples, Peaches, &c. The neighborhood is an excellent one, and the location remarkably healthy—and there is no question but that the timber and wood upon the place, situated as it is immediately on the water, and easily and cheaply transported to the Norfolk market, where it always commands a good price, will more than pay the purchase money required. It is confidently believed that the farm now offered for sale, is the most valuable one which has been in market in this section of Virginia, for many years, and is worthy the attention of the permanent settler, or the capitalist seeking investment.

The price asked, and the lowest which will be taken, is \$1250 per acre—and the terms of payment one-third or one-fourth cash, at the purchaser's option—the remainder in three equal annual instalments, or in two and three years, with interest from the day of sale, and satisfactorily secured. Apply in person, or by letter, postage paid to
may 14f R. A. WORRELL, Norfolk, Va.

Premium Threshers.

FARMERS wishing to obtain these superior machines, will secure themselves against disappointment, and confer a great favor upon the subscriber, by giving their orders as early as convenient.

My Thresher, so long regarded as superior by all who have used them, have, when brought into competition with the best machines of Northern as well as Southern manufacturers at the late Virginia State Fair, received so marked a distinction, by the award of the first premium, that I need only refer to the official report of the Committee in the January of the Southern Plaster, to satisfy all who wish to purchase.

The PITTS PATENT THRESHER, with separator and cleaner attached, to clean wheat or other grain at one operation, is placed prominently in advance of all machines aiming to accomplish this object, by having the first premium offered for the best machine for this purpose awarded to it. Although the one exhibited by me was a rough one, and gotten on the ground in a great hurry, and exhibited without even a decent coat of paint upon it—and under many other disadvantages. The machine manufactured for the exhibition could not be gotten here in time.

Persons wishing to procure this superior and justly celebrated machine, may obtain full description of its peculiar advantages, and adaptedness for large estates, or for traveling machines, to which for full, by addressing the subscriber, who is so agent &c.

I have a few of the above machines ready for work, but on account of the heavy expense of getting them up, and the length of time necessarily consumed in doing so, it is very important to get all orders as soon as possible.

Price of horse power, with thresher, separator and cleaner, in one team, and mounted upon wheels for moving from field to field, or from farm to farm, is \$400. The machine can be seen at my factory, and any inquiries by letter will be answered promptly.

PATENT SAW CUTTERS.—In calling attention to my large stock of implements, comprising Threshers of all sizes, Horse Powers, from 4 to 10 horses, Wheat Fans, Corn Shellers, and Drills, Horse hakes, Cutters and Baylins, Hay Presses, Huskers and Met Onick Peepers, &c.

I wish to keep special attention to my Patent Saw Cutter, for road purposes. This machine received the first premium at the Virginia State Fair, and also at the Kappahannock Valley Society's Fair, and at the Norfolk Fair, and the unanimous recommendation of many thousands of using them. Price \$10, warranted to give satisfaction on trial. I also made securing Smith's Patent Double Fough, known as the North and Double Fough. This fough received the first premium offered for a three horse plough, which was divided between the subscriber and Mr. French, who exhibited the same plough, as will be seen by official report in plainer, as above.

I have HENRY'S REAPERS ready for the next harvest—these can be seen on machine.
may 14f H. M. SMITH,
Richmond, Va.

Sands & Mills, Book and Job Printers,
Office of the "AMERICAN FARMER."

Valuable Farm For Sale.



THE subscribers are authorized to sell the large and valuable estate, known as **LOUSE FARM**, (formerly the property of Col. John E. Howard,) situated on Patuxent Neck, twelve miles from Baltimore, and containing **FOUR HUNDRED AND SIXTY-TWO ACRES**, more or less. It is bounded on the East by the North Point Creek, by Patuxent River on the South; by Back River on the North; and by the farm of Mr. Henry Jones on the West. The improvements consist of a substantial **TWO-STORY DWELLING**, with two Kitchens and Rooms for servants—a large two-story **BRICK BARN**, with Stabling at each end—Ice house, Dairy, Granary,—there have been extra buildings put up within the last two years—corn house, saw house, pigery, sheep house, meat house, &c. About two hundred and fifty acres are cleared and under cultivation—the balance is well timbered with **HICKORY, OAK, &c.** There is every facility for loading vessels from each field. There are several admirable Gunning and Fishing Points on this Farm, and any quantity of Wild Fowl and Fish can be procured without difficulty in the proper season. The ground has been well improved by the use of Guano, lime and ashes, large quantities of each having been used within a short time past. Seventy-five acres are now down in Wheat, put in with guano and clover, and the whole farm is in excellent condition. Persons desirous of purchasing a first rate farm, are invited to view the premises.

If not sold at private sale before **WEDNESDAY**, the 17th day of May, it will be offered on that day at public sale, at 1 o'clock, at the Baltimore Exchange.

TERMS—One-third cash, one third in twelve months, and the remaining third in two years, with security and interest on the credit payments.

For further particulars, apply to **SAMUEL BARNES**, Washingtonville, Baltimore county, or to **SHEPPARD A. LEAKIN**, Attorney at Law, Monument Square. Letters addressed to either of the undersigned, will receive prompt attention.

may 1 SAMUEL BARNES, SHEPPARD A. LEAKIN.

WOOL! WOOL! WOOL!

Those who desire to offer their Wools for sale in this market, should be careful to put it up in good order, when a full market price may be obtained by consigning it to the undersigned, who will grade and sell it always at full market prices—to the business and cash the sales, as low and as promptly as any responsible house in the country, or purchase at market rates at all times.

TOWNER & BROOKS, 342 Baltimore street, Baltimore.

may 1-6m

MEXICAN GUANO

OF the best quality, imported and for sale in lots to suit purchasers, by **CHARLES R. PEARCE**, 65 Buchanan's wharf.

The following remarks in relation to this manure are communicated by Dr. David Stewart, chemist of this city.

MEXICAN GUANO, OR FISH BONE MANURE—PECULIARITIES OF THIS MANURE.

1. It is not volatilized or injured by the sun, and it is not washed out of the soil by the rains in less than 30 years.
2. It can be applied to the corn crop at any time before the last cultivation in July.
3. It supplies the element that is removed from the soil by Indian corn.
4. It will double the crop of corn, if phosphoric acid is deficient in the soil.
5. It is cheaper, more certain and more permanent than Peruvian Guano.
6. It contains more Phosphoric acid than "Bonés" in the proportion that the bones of the fish are richer in this element than other bones.
7. It contains no sand, as the birds that feed on fish have a simple stomach and do not use gravel, and the islands upon which it is deposited are pure Lime or Coral.

For further particulars see American Farmer, vol. 9, page 329; National Intelligencer about the 15th January, and Weekly Sun 21st January, also the handbills. may 1-1f

Guano Agency.

WE are prepared to purchase and ship **PERUVIAN GUANO**, in any quantity not less than one ton. The Guano will always be bought and taken direct from the ships or the warehouses of the Peruvian Agent, in this city, and may therefore be relied on. The terms are \$50.20 per ton of 2240 lbs. and \$1 commission, payable in cash and Baltimore funds, drayage and any necessary incidental expenses to be added.

MEXICAN GUANO.—Those wanting Mexican Guano, will be furnished at the Importers price, and \$1 commission, for purchasing and shipping.

CHESTER PIGS FOR SALE.—Two boars, 12 and 8 mos. old, and 3 sows, 10 mos. old, all in pig, and will have litters this month. This stock is a part of, or from my premium animals. The oldest boar took the 2d premium last Fall. All-3 pairs of Pigs, 2 mos. old. Apply to **C. WARNS**, Elkridge Landing, Md. may 1-1f

BALTIMORE MARKET.—April 29th.

Flour, City Mills & Howard at 9.25 Wheat, 195a205, for fair to prime red, and 200a208 for fair to prime whites—very prime white for family flour 215c.—the latter price is the highest rate obtained this season—the demand is brisk—Corn, Red and White 75a77c. and mixed 72c; Rye, Md. 95c; Pa. do. 106; Oats, brisk, Md. 45a50c; Pa. 53c; Rice, \$381½ per 100 lbs., for common, 4.25a4.37 for good to prime; Sugar, N. O. 42.85a4.53; Whiskey, bbls. 26a27—Md. Tobacco, is in active demand, and though the receipts have largely increased, the sales comprise nearly all that reach the market—and prices would have advanced but for the fact, that the quality is inferior—sales of Corn. to good ord. \$5¼a6; mid. 6a6¼; good to fine brown \$6¼a7;—there is a good demand also for Ohio, but receipts are light.—Wool, fine fleeces 33a 45c., tub washed 28a34, pulled 27a30, unwashed 20a22—Naval Stores, Spirits Turpentine at 66a67 cts. per gallon; Tar at \$3 per bbl.; Pitch at \$2.37½ a\$2.50; Common Rosin at \$1.75; No. 2 do. at \$2; and No. 1 do, at \$3a\$4.—In Provisions but little doing, and prices rather depressed.—Clover Seed \$4.62, Timothy \$3.25.

Guano.—The supply now in market is large, and prices as heretofore, but farmers should lose no time in getting their fall supplies—they will avoid delay, uncertainty, and, we believe, increased expense.

Albany Tile Works.

Corner of Patroon and Knox Sts. Albany, N. Y.

RAIN TILE of the following descriptions and prices, suitable for land drainage, always on hand in large small quantities of the first quality, delivered at the docks and railroad depots free of cartage:

Horse-Shoe Tile.		
4½ inch calibre,	- - -	\$18 per 1000 feet.
3½ do	- - -	15 do
2½ do	- - -	12 do

Sole Tile or Pipe.		
3 inch calibre,	- - -	\$18 per 1000 feet.
2 do	- - -	12 do

Large Tile for drains about dwellings, yards, &c. of various sizes, \$4 and \$8 per 100 feet. Sole Tile, 4 inch calibre, for sink drains at \$4 per 100 feet. Drain your land and save your crops. Orders from a distance receive attention.

A. S. BABCOCK.

may 1-6f

LANDS FOR SALE IN KANAWHA CO. VA.—A large tract of Land, comprising about 2000 acres, on which the subscriber now resides, will be sold at a very low rate to any one wanting to invest in Virginia lands. A more particular description has been left with the editor of this paper—but parties can address **HY. RUFFNER**, Kanawha, Saline, Kanawha Co. may 1-1f



ap 1-2t

COTSWOLD BUCKS.—The subscriber has for sale a lot of superior yearling Cotswold Bucks, bred by himself, which he will deliver in Baltimore. Also a few EWES, of the same breed. Apply to Editor of "American Farmer," or **HENRY CARROLL**, Westernman's Mills P. O. Baltimore Co. Md. ap 1-2t

BAHMA POOTRA FOWLS AND EGGS.—The subscriber will have a few Fowls and Eggs of this breed early in the fall, which he will warrant true. \$5.00 per doz. for Eggs, and from \$10.00 to \$20.00 per pair for Fowls. For further particulars address **WM. B. JACOBS**, Modest Town, Accomac Co. V. may 1-6f

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